

**Revised Draft
Environmental Impact Statement
General Management Plan**

**Mojave National Preserve
San Bernardino County, California**

This *Revised Draft Environmental Impact Statement / General Management Plan* presents the proposed management approach and two alternatives for the management of the 1.6 million-acre Mojave National Preserve in the northeastern Mojave Desert in California. Mojave is a new unit of the National Park Service established by Congress on October 31, 1994, by the California Desert Protection Act (CDPA). The first *Draft Environmental Impact Statement / General Management Plan* was released for public review in September 1998. Eleven public meetings were conducted during the 127-day public review period. Based largely on public comments on that draft plan, the National Park Service made substantial revisions to the 1998 draft plan. This revised draft is being circulated for additional public review. Responses to comments received on the 1998 draft plan are available as a separately bound report.

The general management plan serves as the initial overall management strategy for park units covering 10–15 years. A general management plan is general rather than specific in nature, and focuses on purposes of the unit, its significant attributes, its mission in relation to the overall mission of the agency, what activities are appropriate within these constraints, and resource protection strategies. It also provides guidelines for visitor use and development of facilities for visitor enjoyment and administration of the Preserve. It serves as the overall umbrella guidance for a park unit under which more detailed activity or implementation plans are prepared.

The proposed general management plan (alternative 1) envisions Mojave National Preserve as a natural environment and a cultural landscape (an aridlands ecosystem overlain by many layers of human occupation and use from prehistoric, to historic, to the present time), where the protection of native desert ecosystems, natural processes, and historic resources is assured for future generations. The protection and perpetuation of native species in a self-sustaining environment is a primary long-term goal. The proposal seeks to manage the Preserve to perpetuate the sense of discovery, solitude and adventure that currently exists. This means minimizing development inside the Preserve, including the proliferation of signs, new campgrounds, and interpretive exhibits. The National Park Service would look to adjacent communities to provide most support services (food, gas, and lodging) for visitors. The proposal also seeks to provide the public, consistent with the NPS mission, with maximum opportunities for roadside camping, backcountry camping and access to the Preserve via existing roads. The proposal would seek funding for the complete rehabilitation of the historic Kelso Depot and its use as a museum and interpretive facility. For this National Park Service unit, a balance must be struck between the NPS mission of resource preservation and other mandates from Congress, such as maintaining grazing, hunting, and mining under NPS regulations, and continuing the existence of major utility corridors. The proposal would maintain the ability of landowners in Mojave to maintain their current way of life, while also seeking funding to purchase property from willing sellers where proposed uses conflict with the primary mission of preserving resources. Nearly 230,000 acres within the Preserve were in nonfederal ownership until the recent acquisition of 80,706 acres of Catellus lands.

In addition to the proposed general management plan (alternative 1), the alternatives included in this document also include the no-action alternative, which is existing management (alternative 2), and optional management plan concepts (alternative 3). The existing management alternative describes the continuation of current management strategies. It is commonly referred to as the no-action or status quo alternative. Under this alternative, existing visitor and administrative support services and facilities would be maintained in their current locations. There would be few improvements in existing structures and there would be no change in road maintenance, although some roads might be improved if funding became available. No significant changes in existing recreation use would occur. Kelso Depot would be stabilized if funding could be obtained, but it would not be rehabilitated. Land acquisition would focus on obtaining minimum funds to acquire property from willing sellers and properties where uses conflict with the Preserve mission. Alternative 3 addresses optional scenarios for several key issues where alternative concepts were identified. It provides for an increase in the facilities and services provided for public enjoyment. A small visitor contact building might be built at Cima to provide information. Land would be acquired in sensitive areas and wilderness. More restrictions are imposed on grazing in desert tortoise habitat and road closures in critical habitat are considered. In addition, this alternative evaluates the scenario of NPS maintaining all roads in the Preserve.

The 90-day opportunity for public comment starts with the Environmental Protection Agency filing a notice of availability in the Federal Register. Comments must be received by that time and should be sent to the following address:

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CONTENTS

EXECUTIVE SUMMARY	1
PURPOSE OF AND NEED FOR THE PLAN	47
INTRODUCTION	49
BRIEF DESCRIPTION OF MOJAVE NATIONAL PRESERVE.....	50
PLANNING ISSUES AND MANAGEMENT CONCERNS.....	52
NPS PLANNING PROCESS	52
ISSUE ANALYSIS AND DEVELOPMENT OF ALTERNATIVES	52
Issues Identified During Public Scoping.....	54
PLANNING CONSTRAINTS AND MANDATES.....	57
ACTIONS CONSIDERED FOR ALTERNATIVES BUT REJECTED	58
RELATIONSHIP TO OTHER PLANNING EFFORTS	60
West Mojave Plan	60
Northern and Eastern Colorado Desert Coordinated Management Plan	61
Las Vegas Resource Management Plan.....	61
Spring Mountains National Recreation Area Plan.....	62
Fort Irwin Proposed Expansion	62
Ward Valley (Nuclear Dump) Low Level Radioactive Waste Disposal Site.....	63
Castle Mountain Mine Expansion.....	63
Molycorp Inc. Proposed Mine Expansion and Hazardous Spill Status.....	63
AT&T Coaxial Cable Removal Project	64
Union Pacific Railroad Double Tracking Project	64
Cadiz Groundwater Storage and Dry Year Supply Program.....	65
ALTERNATIVES, INCLUDING THE PROPOSED ACTION.....	67
OVERVIEW OF ALTERNATIVES.....	69
ACTIONS COMMON TO ALL ALTERNATIVES.....	70
PURPOSE AND MANAGEMENT OF MOJAVE.....	70
Purpose and Mission of Mojave	70
Significance of Mojave	71
Interpretive Themes.....	72
Management Objectives.....	72
Carrying Capacity	73
Policy and Planning.....	80
External Boundary and Acreage	82
Wilderness Management.....	83
Fire Management	87
Disturbed Lands.....	87
Non-Federal Land and External Development	91
Partnerships	93
Native American Interests and Relationships.....	96
Natural Resources	98
Environmental Compliance Responsibilities.....	99
Cultural Resources	101
Research and Educational Activities	108
Sustainable Design.....	110
Solid Waste Disposal.....	110
Sand and Gravel for Road Maintenance	110
Military Overflights.....	110
PLAN IMPLEMENTATION.....	111
Staffing and Budget	111
ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	112
GENERAL DESCRIPTION	112
MANAGEMENT OF PARK RESOURCES	113
Physical Resources.....	113
Biological Resources	118

Cultural Resources	132
FACILITIES AND DEVELOPMENT	133
Visitor Information	133
Developed Campgrounds.....	142
Research and Education Centers.....	145
Park Support Facilities.....	146
Access and Circulation	147
Rights-of-way and Easements	150
Wildlife Guzzlers.....	153
Ranching Developments.....	153
USE OF THE PRESERVE.....	154
Recreational Activities.....	154
Commercial Activities	162
PLAN IMPLEMENTATION.....	169
Staffing and budget	169
Estimated Cost of Proposed Facility Development and Major Programs	170
ALTERNATIVE 2: EXISTING MANAGEMENT (NO-ACTION).....	172
GENERAL DESCRIPTION	172
MANAGEMENT OF PARK RESOURCES.....	172
Physical Resources.....	172
Biological Resources	173
Introduced Species	175
Cultural Resources	179
Information Centers	180
Interpretive Facilities	180
Developed Campgrounds.....	183
Research and Education Centers.....	184
Park Support Facilities.....	184
Access and Circulation	186
Rights-of-way and Easements	187
Wildlife Guzzlers.....	188
Ranching Developments.....	188
USE OF THE PRESERVE.....	189
Recreational Activities.....	189
Commercial Activities	191
PLAN IMPLEMENTATION.....	194
Staffing and Budget	194
ALTERNATIVE 3: OPTIONAL MANAGEMENT PLAN	197
GENERAL DESCRIPTION	197
MANAGEMENT OF PARK RESOURCES.....	197
Physical Resources.....	197
Biological Resources	197
Cultural Resources	198
FACILITIES AND DEVELOPMENT	198
Visitor Information	198
Interpretive Facilities	198
Developed Campgrounds.....	199
Research and Education Centers.....	199
Park Support Facilities.....	200
Access and Circulation	200
Rights-of-Way and Easements	202
Wildlife Guzzlers.....	202
Ranching Developments.....	202
USE OF THE PRESERVE.....	203
Recreational Activities.....	203
Commercial Activities	204
PLAN IMPLEMENTATION.....	204
Staffing and Budget	204
Estimated Costs of Proposed Developments and Programs	205

AFFECTED ENVIRONMENT	207
LAND STATUS.....	209
PRESERVE BOUNDARY.....	209
Official Maps and Authorized Acreage	209
WILDERNESS.....	209
Official Maps and Legal Description	209
FIRE MANAGEMENT.....	209
DISTURBED LANDS.....	210
Abandoned Mines.....	210
Hazardous Materials	210
NONFEDERAL LANDOWNERSHIP AND USE	211
California State Lands.....	211
Private lands.....	212
Mining Claims	213
Water Rights	213
MANAGEMENT OF PARK RESOURCES	214
NATURAL RESOURCES.....	214
Physical Resources.....	214
Biological Resources	219
CULTURAL RESOURCES	230
Background.....	230
Prehistoric Resources.....	230
Historic Resources.....	232
List of Classified Structures.....	240
National Register of Historic Places	242
Cultural Landscapes.....	242
Native American Resources.....	243
SOCIOECONOMICS.....	245
Local and Regional Communities.....	245
Mojave National Preserve Community	246
Social Values	246
FACILITIES AND DEVELOPMENT	246
Visitor Information	246
Interpretive Facilities	247
Developed Campgrounds.....	248
Research and Education Centers.....	248
Park Support Facilities.....	249
Access and Circulation	250
Rights-of-way and Easements	253
Railroads	253
Wildlife Guzzlers.....	254
Ranching Developments.....	255
USE OF THE PRESERVE	256
RECREATIONAL ACTIVITIES.....	256
Rock-Climbing.....	258
Hunting, Fishing, and Trapping.....	259
Hiking.....	260
Equestrian Use.....	261
Bicycling.....	261
Four wheel Drive Touring.....	261
Motorcycles and ATVs.....	261
Aircraft.....	261
Backcountry Use and Roadside Vehicle camping.....	261
Groups and Organized Events	262
Visitor Use Fees.....	262
RESEARCH AND EDUCATIONAL ACTIVITIES.....	263
Education	263
Research and Permits.....	263
COMMERCIAL ACTIVITIES.....	264

Mineral Development.....	264
Cattle Grazing.....	264
Filming.....	266
Solid Waste Disposal.....	266
Visitor Services	267
MILITARY ACTIVITIES	267
ENVIRONMENTAL CONSEQUENCES	269
ACTIONS COMMON TO ALL ALTERNATIVES.....	271
IMPACTS ON MANAGEMENT OF THE PRESERVE.....	271
IMPACTS ON NATURAL ENVIRONMENT	273
IMPACTS ON CULTURAL RESOURCES	274
IMPACTS ON VISITOR USE, SERVICES AND FACILITIES.....	274
IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT	274
IMPACTS ON ADMINISTRATIVE OPERATIONS AND FACILITIES	275
IMPACTS ON EDUCATION AND RESEARCH.....	275
IMPACTS ON LANDOWNERSHIP AND COMMERCIAL USE	275
ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	276
IMPACTS ON NATURAL ENVIRONMENT	276
IMPACTS ON CULTURAL RESOURCES.....	282
IMPACTS ON VISITOR USE, SERVICES, AND FACILITIES	283
IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT	286
IMPACTS ON ADMINISTRATIVE OPERATIONS AND FACILITIES	287
IMPACTS ON EDUCATION AND RESEARCH.....	288
IMPACTS ON LANDOWNERSHIP AND COMMERCIAL USE	289
CUMULATIVE IMPACTS.....	289
ALTERNATIVE 2: EXISTING MANAGEMENT (NO-ACTION).....	292
IMPACTS ON NATURAL ENVIRONMENT	292
IMPACTS ON CULTURAL RESOURCES.....	300
IMPACTS ON VISITOR USE, SERVICES, AND FACILITIES	300
IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT	302
IMPACTS ON ADMINISTRATIVE OPERATIONS AND FACILITIES	302
IMPACTS ON EDUCATION AND RESEARCH.....	303
IMPACTS ON LANDOWNERSHIP AND COMMERCIAL USE	303
CUMULATIVE IMPACTS.....	304
ALTERNATIVE 3: OPTIONAL MANAGEMENT PLAN	306
IMPACTS ON NATURAL ENVIRONMENT	306
IMPACTS ON CULTURAL RESOURCES.....	308
IMPACTS ON VISITOR USE, SERVICES, AND FACILITIES	308
IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT	310
IMPACTS ON ADMINISTRATIVE OPERATIONS AND FACILITIES	310
IMPACTS ON EDUCATION AND RESEARCH.....	310
IMPACTS ON LANDOWNERSHIP AND COMMERCIAL USE	311
CUMULATIVE IMPACTS.....	312
OTHER COMPLIANCE REQUIREMENTS.....	313
SUSTAINABLE AND LONG-TERM MANAGEMENT	314
CONSULTATION AND COORDINATION.....	317
PUBLIC INVOLVEMENT	319
PUBLIC SCOPING AND ALTERNATIVES WORKSHOPS	319
DRAFT ENVIRONMENTAL IMPACT STATEMENT	319
COMMENTS ON THE 1998 DRAFT ENVIRONMENTAL IMPACT STATEMENT AND GENERAL MANAGEMENT PLAN.....	320
NEWSLETTERS AND HOMEPAGE.....	320
AGENCY CONSULTATION	321
NATIVE AMERICAN CONSULTATION	322
INTERTRIBAL MEETING	322

MOJAVE NATIONAL PRESERVE ADVISORY COMMISSION.....	322
INVITED COOPERATING AGENCIES.....	324
APPENDIXES	331
APPENDIX A: 1994 CALIFORNIA DESERT PROTECTION ACT (PUBLIC LAW 103-433).....	333
APPENDIX B: KELSO DEPOT DEVELOPMENT CONCEPT PLAN	349
APPENDIX C: DRAFT LAND PROTECTION PLAN FOR MOJAVE NATIONAL PRESERVE.....	369
APPENDIX D: SPECIES OF SPECIAL CONSIDERATION	427
APPENDIX E: DESERT TORTOISE MITIGATION MEASURES.....	435
APPENDIX F: PRINCIPLES FOR WILDERNESS MANAGEMENT IN THE CALIFORNIA DESERT	442
APPENDIX G: TERMS AND CONDITIONS OF SPECIAL USE PERMIT FOR GRAZING.....	459
 PREPARERS.....	 466
ACRONYMS AND GLOSSARY.....	467
REFERENCES	476
INDEX.....	485

FIGURES

1. Region	51
2. Existing Land Uses and Desired Future Conditions	77
3. Mojave National Preserve Boundary and Wilderness Areas	85
4. Abandoned Mine Lands	89
5. Kelso Depot Site Plan	135
6. Soda Springs (Zzyzx) Developed Area	137
7. Hole-In-The-Wall Developed Area	139
8. Granite Mountains Natural Reserve	143
9. Major Rights-Of-Way	152
10. No Shooting Areas	157
11. No Camping Areas	160
12. Mining Claims	163
13. Cattle Grazing Permits	167
14. Kelso Depot Existing Site Conditions	181
 B-1. Kelso Depot Proposed Landscape Plan	 361
B-2. Kelso Depot Proposed Basement Floor Plan	363
B-3. Kelso Depot Proposed First Floor Plan	365
B-4. Kelso Depot Proposed Second Floor Plan	367
 C- 1. Mojave National Preserve Non-Federal Lands	 397
C- 2. Mojave National Preserve Mining Claims	399
C- 3. Mojave National Preserve Known Water Rights	400
C- 4. Mojave National Preserve Major Rights-of-Way	401
C- 5. Mojave National Preserve Grazing Permits	403

TABLES

1: Summary of Proposed General Management Plan and Alternatives	3
2: Summary of Impacts	34
3: Actions Common to All Alternatives Cost Summary	111
4: Grazing Permits and Perennial AUMs	1666
5: Existing and Proposed Staffing	170
6: Proposed Action Cost Summary	171
7: Existing Grazing Permits and Authorized Perennial AUMs	193
8: Existing Management Alternative Staffing	195
9: Optional Management Alternative Cost Summary	205
10: Bighorn Sheep Populations In or Near Mojave National Preserve	224
11: Feral Burro Population Estimates for Mojave National Preserve	228
12: 1995 Average Daily Traffic Levels	251
13: July–December 1996 Traffic Count	252
14: Annual Visitation for Mojave National Preserve	256
15: BLM Visitor Activities in East Mojave (pre-CDPA)	257
16: BLM Visitor Profile for East Mojave National Scenic Area	257
17: Mojave National Preserve Visitor Profile	258
18: Mojave National Preserve Visitor Activities	258
19: Northeastern San Bernardino County Buck Kill Data	260
20: Hunting Statistics for San Bernardino County	260
21: Bighorn Sheep Harvest	260
22: Grazing Allotments/Permits in and Adjacent to Mojave National Preserve	266
23: Area of Grazing Permits in Critical Habitat	311

EXECUTIVE SUMMARY

This *Revised Draft Environmental Impact Statement / General Management Plan* evaluates alternative management approaches for Mojave National Preserve in the northeastern Mojave Desert in California. Mojave is a new unit of the National Park Service established by Congress on October 31, 1994, by the California Desert Protection Act. This document is one of three prepared for the Northern and Eastern Mojave Planning Area as part of an interagency coordinated planning effort. The *Revised Draft Environmental Impact Statement / General Management Plan* for Death Valley National Park and the *California Desert Conservation Area Plan* amendment for the Bureau of Land Management lands were to be released at about the same time as this document.

As a new unit of the national park system, Mojave has no existing management plans in place. This effort will produce the first general management plan that will serve as the overall management strategy for the next 10–15 years. More detailed activity or implementation plans will be prepared under this plan. The general management plan is general in nature, rather than specific, and focuses on purposes of the unit, its significant attributes, its mission in relation to the overall mission of the agency, what activities are appropriate within these constraints, and resource protection strategies. It also provides guidelines for visitor use and development of facilities for visitor enjoyment and administration of the unit.

The impetus for this plan was the passage of the California Desert Protection Act on October 31, 1994. This act transferred over 3 million acres of the California desert from the Bureau of Land Management (BLM) to the National Park Service (NPS) and designated nearly 8 million acres of wilderness on NPS and BLM lands. In addition, the California Desert Protection Act created the Mojave National Preserve and redesignated Death Valley and Joshua Tree National Monuments as national parks. Changes in the management of the public lands in the California desert, including listing of the desert tortoise, increasing development, public use pressures, and passage of the California Desert Protection Act, caused NPS, BLM, and U.S. Fish and Wildlife Service (FWS) desert managers to address the anticipated changes in management of these federal lands by looking at management issues beyond traditional boundaries. Three sub-regional planning teams were established in the desert region of southern California: the West Mojave Plan in the western Mojave Desert, the Northern and Eastern Mojave Planning Effort in the northern and eastern Mojave Desert, and the Northern and Eastern Colorado Planning Effort in the northern and eastern Colorado Desert. These teams would gather information, define issues, and develop methods for issue resolution. The National Park Service, which manages most of the land in the northern and eastern Mojave Desert, took the lead for the Northern and Eastern Mojave interagency planning effort. The other participating agencies are the Bureau of Land Management and the U.S. Fish and Wildlife Service. The Bureau of Land Management is the lead for the West Mojave Plan and the Northern and Eastern Colorado Planning Effort. The planning region boundaries for all three areas will cease to exist when the planning efforts are completed.

The planning team conducted 20 public meetings in September 1995 and April 1997 to gather public input on the management direction for the parks and BLM lands. From this input and meetings with interested parties (such as county departments, special interest groups, state agencies, Native American tribes, etc.) and discussions with NPS and BLM staff, proposed management plans were developed. This proposed plan for Mojave National Preserve (alternative 1) is compared with existing management or the no-action alternative (alternative 2), and with a third optional management approach (alternative 3). Table 1 provides a summary of the actions examined under each alternative. Table 2 is a summary of the primary effects of each action.

The *1998 Mojave National Preserve Draft Environmental Impact Statement / General Management Plan* was released for public review in September 1998. Eleven additional public meetings were conducted during the 127-day public review period. Responses to written public comments on the proposed action and alternatives in the 1998 draft plan are addressed in this *Revised Draft Environmental Impact Statement / General Management Plan*. Responses to comments received on the 1998 draft plan are available as a separately bound report. More public meetings will be held after this document's release. Responses to comments on the revised proposed action and alternatives will be addressed in the final environmental impact statement. Thirty days after release of the final environmental impact statement a record of decision will be produced. Soon after the record of decision a summary general management plan and land protection plan for the park will be released. These documents will be summary presentations of the management direction arrived at through the public process.



Castle Peaks

Table 1: Summary of Proposed General Management Plan and Alternatives

TABLE 1: SUMMARY OF PROPOSED GENERAL MANAGEMENT PLAN AND ALTERNATIVES

ACTIONS COMMON TO ALL ALTERNATIVES	
<i>Purpose and Mission</i>	<p>Specific purposes for Mojave can be summarized as follows:</p> <p>Preserve and protect the natural and scenic resources of the Mojave Desert, including transitional elements of the Sonoran and Great Basin deserts.</p> <p>Protect and preserve the historical and cultural values of the California Desert associated with ancient Indian cultures, patterns of western exploration and settlement, and sites exemplifying the mining, ranching and railroading history of the Old West.</p> <p>Provide opportunities for compatible outdoor recreation and promote understanding and appreciation of the California desert.</p> <p><i>Mission Statement:</i> Mojave National Preserve was established to preserve outstanding natural, cultural, and scenic resources while providing for scientific, educational, and recreational interests.</p>
<i>Significance</i>	<ul style="list-style-type: none"> • Mojave National Preserve protects an extensive variety of habitats, species, and landforms unique to the Mojave Desert and is the best place to experience this ecosystem. • Mojave National Preserve contains outstanding scenic resources, rich in visual diversity containing a varied landscape of sand dunes, mountain ranges, dry lake beds, lava flows, cinder cones, Joshua tree forests, and far-reaching vistas. • The Joshua tree forest of Cima Dome and Shadow Valley is the largest and densest population of Joshua trees in the world. • The Preserve is internationally known as a place to conduct desert research, and its lands are known for their geological features such as Cima Dome, the Cinder Cones, and the Kelso Dunes. • Mojave is a naturally quiet desert environment with very dark night skies that offers visitors and researchers opportunities for natural quiet, solitude and star gazing with few human caused noise or light glare sources. • The Mojave Desert has a long cultural history as a travel corridor across a harsh and foreboding desert, linking different areas in the Southwest. During the late 19th and early 20th centuries, railroads were constructed in this historic transportation corridor; more recently, modern interstate highways traverse the area. • Mojave National Preserve protects many significant rock art sites that provide evidence of early Native American use of the Mojave Desert. • Mojave National Preserve protects numerous historic sites from early mining, ranching, homesteading and railroading endeavors that serve as reminders of the bold and tough people that opened the harsh and forbidding western frontier. • Historic Kelso Depot is associated with the early 20th century heyday of the great steam locomotives and the establishment of the final major rail crossings of the Mojave Desert. The Kelso Depot, built in 1924, is a rare surviving example of a combined depot, railroad restaurant, and employees' rooming house.
<i>Interpretive Themes</i>	<p>The primary park stories or interpretive themes are overview statements that provide the basis for communicating the purpose and significance of the park and provide the elements that the park believes each visitor should develop an understanding of during their visit. These themes would be developed during the preparation of a comprehensive interpretive plan for the Preserve and would guide the development of interpretive materials (signs, brochures, walks, talks, etc.).</p>
<i>Management Objectives</i>	<ul style="list-style-type: none"> • Seek to protect significant natural and cultural resources and values, including geologic features, and to foster an improved understanding of natural processes and cultural resources through monitoring efforts and scientific research. • Participate cooperatively in the preservation of ecological resources and cultural/ethnographic resources that extend beyond the Preserve's boundaries. • Manage visitor use in a manner that promotes and perpetuates a sense of exploration and self-discovery, while protecting resources from overuse. • Educate visitors regarding the National Park Service mission and the natural and cultural resources of the Preserve. • Seek to continually improve the efficiency and effectiveness of operations and administration. Adopt and incorporate sustainable practices into all aspects of park operations. • Perpetuate the natural quiet and sense of solitude in the Preserve. Adopt strategies and work actively to reduce human-caused noise impacts from internal and external noise sources, including aircraft overflights. • Perpetuate scenic and cultural landscapes. Landscapes should be free from activities and facilities that distract from the scenic beauty or the historic condition of the landscape. • Protect wilderness values and the wilderness experience in areas congressionally designated as wilderness and manage desert resources, including wilderness, for maximum statutory protection provided for under the law. • Perpetuate and improve dark night sky conditions wherever feasible. Adopt criteria for protecting dark sky

ACTIONS COMMON TO ALL ALTERNATIVES	
	<p>conditions and work with adjacent permitting entities to reduce glare from light sources.</p> <ul style="list-style-type: none"> Find creative ways to increase the accessibility of NPS programs, facilities and experiences in a reasonable manner. Provide access for all segments of the population, including visitors with disabilities, small children, senior citizens, and populations that generally do not use national parks, in accordance with the laws requiring the National Park Service to preserve and protect wilderness and cultural and natural resources for the enjoyment of future generations. Pursue mutually supportive partnerships with representatives from gateway communities and local and tribal governments. Consider ways in which communities and the parks can support each other. Promote economic growth of communities in ways that complement the Preserve's management objectives.
<i>Carrying Capacity</i>	<ul style="list-style-type: none"> General management plans provide NPS managers with management direction on a broad, prescriptive level. Management objectives for carrying capacity are thus written as narrative statements. These statements define the desired future visitor experience and resource conditions in qualitative terms. Desired future conditions for natural and cultural resources and the visitor experiences are described to serve as guides for managing the land and facilities to achieve desired carrying capacities.
<i>Policy and Planning</i>	<ul style="list-style-type: none"> Management of the national park system and NPS programs is guided by the Constitution, public laws, treaties, proclamations, executive orders, directives of the Secretary of the Interior and the Assistant Secretary for Fish and Wildlife and Parks, and by rules and regulations. NPS Servicewide management policies are established by the director and provide the overall framework and guidance for park management decisions. The NPS planning process is designed in tiers to be flexible and dynamic, beginning with overall management strategies and becoming increasingly more detailed and complementary. General management plans represent the first phase of tiered planning for parks and provide the overall management framework under which other more detailed plans are developed. In 1993, Congress passed the Government Performance and Results Act (GPRA), requiring the federal government to adopt goal driven performance management concepts already widely used by the private sector. GPRA requires agencies to develop, strategic plans covering five years, annual performance plans and annual performance reports. Additional NPS implementation planning documents have been identified as being needed to supply detailed information for specific topics.
<i>Mojave Boundary</i>	<ul style="list-style-type: none"> Section 502 of the California Desert Protection Act established the Mojave National Preserve. The National Park Service prepared the official boundary maps (seven map sheets dated July 1996) according to the section 504 and submitted them to Congress in August 1996, completing the legislative process of preparing official boundary maps of the Preserve. The official boundary map submitted to Congress reflects a total acreage of 1,589,165 acres of land included within the external boundary of Mojave. No changes in the boundary of the Preserve are proposed at this time.
<i>Wilderness</i>	<ul style="list-style-type: none"> In 1994, with passage of the California Desert Protection Act, Congress designated 695,200 acres of wilderness within the Mojave National Preserve. Wilderness is managed for maximum statutory protection per California Desert Protection Act, for use and enjoyment of the American people, in such manner as would leave them unimpaired for future use and enjoyment as wilderness. Existing developments in wilderness would be examined in light of the restrictions in the Wilderness Act on structures and installations, subject to private rights. A minimum tool determination would be used prior to granting approval for motorized/ mechanical equipment use within wilderness. Such use would be considered extraordinary and would not be routinely allowed unless unusual circumstances warrant it. Native Americans are ensured access for traditional cultural and religious purposes to NPS or BLM wilderness, but such access must be consistent with the Wilderness Act [sec. 705 (a)]. Owners of nonfederal lands or interests are provided adequate access for reasonable use and enjoyment of their property. Additions or deletions to designated wilderness, or changes in corridors prescribed by Congress, would require legislation to enact. No such proposals are being made at this time.
<i>Fire Management</i>	<ul style="list-style-type: none"> All human caused fire would be suppressed, and all fire management actions would be implemented using methods, equipment and tactics that cause the least impact on natural and cultural resources. A "minimum requirement" process would continue to be used for every fire in wilderness to determine the "minimum tool or administrative practice necessary to successfully and safely accomplish the management objective with the least adverse impact on wilderness character and resources" (NPS Management Policies 6:4) The National Park Service is assessing and documenting the state of existing fire effects research in desert ecosystems. In cooperation with other desert parks, allied federal and state land managers, agency and university research staff, the National Park Service would assess research needs and long-term studies would be initiated.

Table 1: Summary of Proposed General Management Plan and Alternatives

ACTIONS COMMON TO ALL ALTERNATIVES	
Disturbed Lands	<ul style="list-style-type: none"> To the maximum extent possible, plantings in all areas would consist of species native to the park or historically appropriate for the period or event commemorated as outlined in the Secretary of the Interior's Standards for the Treatment of Historic Properties. The use of exotic species would conform to the NPS exotic species policy (NPS 2000). In natural areas, disturbances caused by natural phenomena such as landslides, earthquakes, floods, and natural fires would not be modified unless required for public safety, protection of NPS facilities, or necessary reconstruction of dispersed-use facilities, such as trails. In cultural areas such as at Kelso Depot and Zzyzx, trees, other plants, and landscape features would be managed to reflect the historical designed landscape or the historical scene associated with a significant historical theme or activity. <p><i>Abandoned Mines:</i></p> <ul style="list-style-type: none"> The National Park Service would conduct a comprehensive inventory of all Abandoned Mine Lands sites to serve as a basis for future planning and reclamation program implementation. Mines would not be reclaimed until evaluated for historical significance and integrity in compliance with the National Historic Preservation Act of 1980, as amended. The program goals would include eliminating physical safety hazards and hazardous materials; mitigation of adverse environmental impacts to park resources, including the restoration of landscapes, soils and vegetation; protection of important wildlife habitat such as bat habitat; and preservation of historic and cultural resources which may include stabilization of structures. <p><i>Hazardous Materials:</i></p> <ul style="list-style-type: none"> The National Park Service would continue to work to remove hazardous materials from several sites in the Preserve. An inventory and assessment program is underway. Some cleanups have occurred by contract, through partnerships with volunteer organizations and state agencies, and by staff participation in all employee cleanup projects. Mojave would work with the transporters to develop a specific plan to address operations and responsibilities in case of a major incident and to address routine hazardous waste generation and disposal and incidents of illegal dumping. The National Park Service is required by Secretarial Order 3127 to conduct a site assessment for hazardous materials on all properties being considered for acquisition.
Nonfederal Land and External Developments	<p><i>Land Acquisition:</i></p> <ul style="list-style-type: none"> The National Park Service would seek funds to acquire private lands and interests in the Preserve on the basis of priorities presented in the "Land Protection Plan." The California Desert Protection Act (CDPA), section 516, provides the NPS authority to acquire all lands and interests in lands with the boundary of the Preserve. In June 2000, Mojave completed the purchase of most Catellus lands in the Preserve (approx. 80,706 acres) with funds appropriated by Congress and with donated funds. Donations and exchanges of real property from willing sellers would be a priority, and third-party acquisitions from willing sellers would be encouraged. Purchase of base property from willing seller ranchers is a priority over other acquisitions, in accordance with CDPA direction (section 510). Water rights would be purchased with permit. Private land that contains single family homes would not be considered for acquisition, unless offered by the owners, or unless development on the property is proposed or occurring that is detrimental to the integrity of the Preserve or is incompatible with the purposes of the CDPA, Title V. Whenever acquisitions of private land occurs, the parcel would automatically become part of the Preserve pursuant to section 517 of the CDPA, and no boundary adjustment is needed. Parcels within the boundaries of wilderness automatically become wilderness upon acquisition according to section 704. Section 707 of the CDPA provides for the exchange of California State school land that is located within the boundaries of parks or wilderness areas. In 1998, the first exchange occurred, resulting in Mojave receiving title to portions of 22 sections totaling 15,066 acres. <p><i>Development on Private Lands:</i></p> <ul style="list-style-type: none"> Most development on private lands is regulated by the County of San Bernardino. The county adopts and enforces land use regulations that control the type and density of land use and development on private property, and ensure adherence to basic public health and safety standards. With the exception of one parcel at Cima, the entire Preserve is zoned for resource conservation, where single family homes are allowed with minimum lot size of 40 acres. Section 519 of the California Desert Protection Act provides that private lands within the boundary of the Preserve are not subject to rules and regulations that are applicable solely to federal lands. However, this section

ACTIONS COMMON TO ALL ALTERNATIVES	
	<p>also provides that this restriction does not apply to mining, oil and gas development or Clean Air Act requirements.</p> <p><i>External Threats from Adjacent Lands:</i></p> <ul style="list-style-type: none"> • Park staff would work cooperatively with others to anticipate, avoid and resolve potential conflicts and to address mutual interests in the quality of life for community residents. • Park staff would review permit applications and environmental documents and determine threats to park resources or visitor experience.
<i>Partnerships</i>	<ul style="list-style-type: none"> • The park would pursue opportunities that would result in the development of cooperative agreements and partnership agreements with stakeholders interested in assisting with the protection of park resources and providing for visitor services. • The park would encourage and support economic growth of gateway communities in ways that complement the Preserve's mission and management objectives. • Mojave would promote cooperative relationships with educational and scientific institutions and qualified individuals with specialized expertise that can provide significant assistance to the park. • Continue to pursue partnerships with schoolteachers and university field offices at Soda Springs Desert Studies Center and Granite Mountains Natural Reserve to provide students and the public with current information on the cultural and natural elements of the Preserve. • A cooperative management agreement would be developed between the National Park Service and the California State University (CSU) to provide for the management of the facilities at the Soda Springs Desert Study Center, and to ensure the continuation of desert research and educational activities, consistent with laws applicable to NPS units. • A cooperative management agreement has been developed between the National Park Service and the University of California, to provide for the management of lands within the Granite Mountains Natural Reserve, and to ensure the continuation of arid lands research and educational activities, consistent with laws applicable to NPS units. • The Preserve would support the retention of cooperative ecosystem studies units and would use them as one mechanism to provide research, inventory and monitoring capabilities to meet park objectives. • The National Park Service would seek to develop a partnership with the California Department of Parks and Recreation to share staff, expertise, facilities and other resources for resource management, interpretation, law enforcement and maintenance activities for the Providence Mountains State Recreation Area.
<i>Native American Interests and Relationships</i>	<p><i>Tribal Relationships:</i></p> <ul style="list-style-type: none"> • National Park Service would continue to work and consult with the tribes on a government-to-government basis to ensure that their interests in these areas are properly considered before any relevant NPS decisions are made. • The National Park Service would consult on a regular basis with historically affiliated tribes to accomplish its programs in ways that respect their traditions, beliefs, practices, and other cultural values. NPS staff would continue to work with the tribes in ways such as the following: <ul style="list-style-type: none"> Consulting on any future NPS planning documents Consulting on NPS operations as they may affect any economic interests of the tribes Consulting on NPS operations as they may affect any joint law enforcement efforts or other intergovernmental concerns Consulting on resource management, especially cultural resource management such as identifying and protecting archeological and ethnographic sites Consulting on cultural matters, such as interpretation of Indian history and heritage • Any archeological, ethnographic, and historical collections of Mojave National Preserve would be managed in accordance with the <i>NPS Management Policies</i> (2000), its <i>Museum Handbook</i> (1998); and its <i>Cultural Resource Management Guidance</i> (Director's Order 28: 1998). • The National Park Service would seek to identify, preserve, and manage "Indian trust resources" as specified in the aforementioned departmental order and corresponding NPS policy document. Section 705 of the California Desert Protection Act recognizes past uses of the parks and wilderness areas by Indian people for traditional cultural and religious purposes, and ensures access for these uses. The act also provides for temporary closures to the general public in order to protect the privacy of such activities. • The National Park Service would seek to identify, preserve, and manage "sacred sites" as specified in Executive Order 13007 of May 24, 1996.
<i>Natural Resources</i>	<ul style="list-style-type: none"> • Management of the Preserve's resources is guided by direction provided in the enabling legislation and NPS regulations and policies. • A set of protection goals and criteria would be developed through the inventory and monitoring program to

Table 1: Summary of Proposed General Management Plan and Alternatives

ACTIONS COMMON TO ALL ALTERNATIVES	
	<p>establish a standard set of resource protection guidelines.</p> <ul style="list-style-type: none"> • Mojave would assemble baseline inventory data describing the natural and cultural resources under its stewardship, and will monitor the resources at regular intervals to detect or predict changes. • Currently project priorities are determined on the basis of existing staff availability and funding. • An annual performance plan provides goals, objectives, and annual work plans. Mojave's strategic plan also establishes five-year goals that provide a limited view of resource issues and allocation of staffing and funding. • Mojave would develop and implement a systematic, integrated program to identify, inventory, and monitor its natural and cultural resources.
<i>Environmental Compliance Responsibilities</i>	<ul style="list-style-type: none"> • Every action taken or plan proposed by the National Park Service (NPS) that could affect natural resources or the quality of the human environment is subject to a host of laws and regulations designed to protect and enhance the environment. These laws and regulations constitute Mojave's environmental compliance responsibilities. • Some of the laws that Mojave must consider as part of its regular environmental compliance responsibilities include the Clean Air Act, the Clean Water Act, and the Wilderness Act. In addition, Mojave must comply with several laws and regulations that pertain to cultural resources. <p><i>National Environmental Policy Act (NEPA):</i></p> <ul style="list-style-type: none"> • Created a formal, legal process for integrating environmental values into federal decision-making; and provided an umbrella under which compliance with several environmental laws can be integrated. • It specifically directs federal agencies to include in every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment, "a detailed statement on the environmental impact of the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, and alternatives to the proposed action." <p><i>Endangered Species Act of 1973 (ESA):</i></p> <ul style="list-style-type: none"> • Calls for the preservation and recovery of threatened and endangered species and their habitat. • Section 7 requires federal agencies to consult with the U.S. Fish and Wildlife Service if their activities may affect a listed species, and requires the agencies to develop programs for the conservation of listed species (50 CFR 402 provides details on the consultation process). • Section 9 contains "taking" prohibitions for endangered animal species. The term "take" means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct." • Due to the presence of the threatened desert tortoise, the ESA is a law that pervades nearly all actions taken within Mojave.
<i>Cultural Resources</i>	<p><i>Baseline Data:</i></p> <ul style="list-style-type: none"> • The National Park Service would develop and implement a systematic applied cultural resource research program to ensure that (1) there would be adequate baseline information on location, condition, threats, and significance/integrity of resources; (2) interpretation and preservation treatment of resources would be accurate; and (3) appropriate means would be used to manage, protect, preserve, and interpret Native American heritage or other ethnographic resources. <p><i>Archeological Resources:</i></p> <ul style="list-style-type: none"> • Mojave National Preserve would seek to identify, protect, preserve, and interpret archeological resources under its jurisdiction. • Since 1997, Mojave has been developing an archeological sites management inventory system (ASMIS). Archeological and project data collected up to 1999 (approximately 1,300 sites) has been entered in the database. • In 1996 the California Historical Resources Information System (CHRIS) was initiated, with the support of the Desert Managers Group, for the development of an Internet-based GIS application for the digitizing archeological information available in the California Information Centers. CHRIS has digitized all the base maps at the San Bernardino Information Center. <p><i>List of Classified Structures (LCS):</i></p> <ul style="list-style-type: none"> • LCS is a park's computerized inventory of known historic and prehistoric structures having historical, architectural, or engineering significance, in which the NPS has, or plans to acquire, any legal interest. • Properties included in the LCS are either on or eligible to the National Register or are to be treated as cultural resources by law, policy, or decision reached through the planning process even though they do not meet all National Register requirements • Seventy-two structures are currently listed in the Preserve's LCS. This list is a preliminary list and will be maintained and updated as necessary to reflect current research, surveys and interpretations. <p><i>Cultural Landscapes:</i></p> <ul style="list-style-type: none"> • The Cultural Landscape Inventory (CLI) is an evaluated inventory of all cultural landscapes (landscapes, component landscapes, landscape features, and component landscape features) having historic significance in which the National Park Service has or plans to acquire legal interest. • At least sixteen potential historic landscapes have been identified in Mojave National Preserve that are potentially

ACTIONS COMMON TO ALL ALTERNATIVES	
	<p>eligible for listing on the National Register of Historic Places, but cultural landscape studies have not been undertaken to identify their character-defining elements.</p> <ul style="list-style-type: none"> The Preserve would inventory the cultural landscapes and prepare nomination for those determined to be eligible for the National Register of Historic Places. <p><i>National Register Properties:</i></p> <ul style="list-style-type: none"> The National Register is the nation's official list of districts, sites, buildings, structures, landscapes and objects in both public and private ownership that are significant in American history, architecture, archeology, engineering, and culture. Section 110 of the NHPA mandates that all federal properties that are over 50 years of age must be inventoried and evaluated for eligibility to the National Register. The historic resources study, scheduled for completion by 2005 would identify additional properties that may be nominated to the National Register. <p><i>Ethnography:</i></p> <ul style="list-style-type: none"> Develop programs, policies, guidelines, and data to help identify and protect culturally significant resources falls to the Preserve's applied ethnography program. A major goal is to facilitate collaborative relationships between the NPS and the people, including Native American groups and the ranching and grazing communities in the Preserve area, whose customary ways of life affect, and are affected by, NPS resource management. <p><i>Collections Management:</i></p> <ul style="list-style-type: none"> The National Park Service would prepare a scope of collections statement and a collection management plan to address and document the management, protection, preservation, and use of natural and cultural specimens, objects, documents, photographs or electronic media in accordance with the provisions of NPS <i>Director's Order 77</i>. Mojave staff are currently evaluating alternatives for curatorial planning needs. Curatorial storage preference would be given to local facilities that would be more readily accessible to park staff and researchers. The Preserve has existing collections onsite; they include the library, a growing collection of paper and photographic archives, and a few historic items from Kelso Depot. Archeological materials emanating from compliance activities currently are stored at WACC. <p><i>Compliance Responsibilities:</i></p> <ul style="list-style-type: none"> Management of cultural resources is subject to the requirements of numerous federal laws, implementing regulations, NPS and Departmental management policies and guidelines, and programmatic agreements. The National Park Service also consults with the tribal historic preservation officers on all matters affecting cultural resources.
<i>Research and Educational Activities</i>	<p><i>Education</i></p> <ul style="list-style-type: none"> Mojave would maintain an active presence in local classrooms throughout the high desert. Mojave would provide staff to lead specific ranger walks and talks for school groups as requested. The park would also offer educational activities for school groups at the Kelso Depot visitor center when this facility is operational. Schools would also be encouraged to utilize the park for extended classroom work, such as week long classes over spring break, where schools may bring a class and conduct an entire field class focusing on desert resources. The University of California through the Granite Mountains Natural Reserve, and California State universities through the Soda Springs Desert Study Center, already promote school educational activities and offer specific classes for students and the general public via cooperative agreements with the park. <p><i>Research and Permits:</i></p> <ul style="list-style-type: none"> Non-NPS studies, including data and specimen collection, require an NPS research/collecting permit. The studies must conform to NPS policies and guidelines regarding publication of data, conduct of studies, wilderness restrictions, and park-specific requirements pursuant to the terms and conditions of the permit. The superintendent would issue permits for all research and collection. Published research results would be provided to the park as a condition of all permits and be made available for use by park staff and the public. NPS research/collecting permits may include requirements that permittees provide for parks, within certain time-frames, the appropriate field notes, data, information about the data, progress reports, interim and final reports, and publications derived from the permitted activities. The Preserve would promote cooperative relationships with educational and scientific institutions and qualified individuals with specialized expertise that can provide significant assistance to the park. Mojave would cooperate with researchers and universities to identify methods and techniques that may be employed to ensure protection of research equipment and plots. <p><i>Natural Resource Collection:</i></p> <ul style="list-style-type: none"> Living collections would be managed in accordance with the provisions of a park's resource management plan (when developed), the Federal Animal Welfare Act, and other appropriate requirements.

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ACTIONS COMMON TO ALL ALTERNATIVES			
	<ul style="list-style-type: none"> • With respect to paleontological resources, any rare or scientifically significant specimens would be collected, or stabilized and protected in situ. • Associated scientific data, including geographic, geologic, and stratigraphic information, would be documented with all fossil collecting activities. • Paleontological specimens are also subject to the treatment policies for museum objects. • Commercial application of any specimens, including any components of specimens (natural organisms, enzymes, genetic materials or seeds) collected under an NPS collecting permit must be done in accordance with a cooperative research and development agreement (CRADA). 		
<i>Sustainable Design</i>	<ul style="list-style-type: none"> • Mojave would implement sustainable practices and pollution prevention activities in all its management actions, including the planning, construction, and maintenance of facilities. • Alternative energy sources such as solar electricity would be considered for facilities at remote NPS locations of housing or operations. • Park facilities and operations would incorporate sustainable practices and elements to the maximum extent practicable in planning, design, siting, construction, building materials, utility systems, recycling, and waste management. 		
<i>Solid Waste Disposal</i>	<ul style="list-style-type: none"> • Solid waste would continue to be hauled to an approved site outside the Preserve. • The Baker landfill was closed by state law in 1997. The site was recontoured and fenced (including tortoise proof fencing) and is being monitored by the county. • Mojave would work cooperatively with Baker and the county to find locations outside the Preserve to relocate the existing transfer site and sewage lagoons. 		
<i>Sand and Gravel for Road Maintenance</i>	<ul style="list-style-type: none"> • Building materials (sand, gravel, and cinders), geothermal resources, and oil and gas on federal lands in the Preserve are not available for extraction or sale. • Use of borrow materials for road maintenance must conform to existing NPS policy, which requires materials to be obtained from sources outside the Preserve unless economically infeasible. 		
<i>Military Overflights</i>	<ul style="list-style-type: none"> • Section 802 of the California Desert Protection Act (CDPA) authorizes continued low-level overflights by military aircraft over new parks and wilderness areas. • Mojave would monitor military overflights and attempt to document where conflicts with visitor use or resource protection may exist. The park would seek to minimize such conflicts wherever possible, while recognizing the military's mission and authorized use. • The park would work closely with the airspace manager and the Interagency Overflight Working Group to identify conflicts and implement solutions. 		
<i>Plan Implementation</i>	<ul style="list-style-type: none"> • Programs and responsibilities identified under this section of the alternatives would result in the need for 15 additional staff and approximately \$1.6 million over the existing conditions at the Preserve. 		
	ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
GENERAL DESCRIPTION OF ALTERNATIVES			
	<ul style="list-style-type: none"> • Protecting cultural and natural resources and providing for visitor enjoyment are primary goals. • Balance this mission with the other Congressional mandates, such as maintaining grazing, hunting, and mining under NPS regulations, and continue existence of major utility corridors. • Preserve is a self-sustaining natural environment and a cultural landscape, where native desert ecosystems and processes are assured for future generations. • Manage the Preserve in a manner to perpetuate the sense of discovery and adventure. • Look to adjacent communities to provide 	<ul style="list-style-type: none"> • Follow the existing management approach that the National Park Service has been following since the creation of Mojave National Preserve by the 1994 California Desert Protection Act. • These actions are typically referred to as the status quo or no-action alternative, since this is what would occur if no planning was undertaken. • Management of the Preserve is being done in accordance with federal regulations, NPS servicewide management policies, and subject specific 	<ul style="list-style-type: none"> • This alternative is the same as alternative 1, except for the specific changes to the following topics. • If no alternative concept was identified that was feasible and implementable as a management plan strategy, without seeking legislation, then that topic is the same as the proposed action. • Any of these concepts could be substituted in the final management plan strategy that is selected.

	ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
	<p>most support services and facilities.</p> <ul style="list-style-type: none"> Rehabilitate and partially restore Kelso Depot to serve as a museum and visitor center. Provide funding for purchase of property from willing sellers where proposed uses conflict with primary mission. 	reference manuals and guidelines.	
MANAGEMENT OF PARK RESOURCES			
<i>Physical Resources</i>	<p><i>Air, Viewsheds, Night Sky, Noise, Soils:</i></p> <ul style="list-style-type: none"> National Park Service would actively participate in adjacent land use planning and would monitor the visual, air, night sky, and water resources of the Preserve. <p><i>Water:</i></p> <ul style="list-style-type: none"> Water would be used efficiently and frugally in accordance with legal authority and with consideration for the needs of other water users. Mojave would seek to protect, perpetuate, and possibly restore surface water and groundwater as integral components of park aquatic and terrestrial ecosystems. Surface water and groundwater withdrawn for the public use would be the minimum amount necessary to achieve Preserve purposes. All water withdrawn for domestic use would be returned watershed system once it has been treated to ensure that there would be no impairment of Preserve resources. The effects to the Preserve's resources from water withdrawn from sources outside of the Preserve would be monitored. Occupancy and modification of floodplain and wetland areas would be avoided wherever possible. The National Park Service and Bureau of Land Management work to protect federal water rights established by the California Desert Protection Act and other authorities. The National Park Service and Bureau of Land Management have agreed to incorporate respective policies, guidelines and listed principles to manage and protect federal water rights. <p><i>Paleontology:</i></p> <ul style="list-style-type: none"> Paleontological resources would be inventoried, monitored, protected, preserved, and made available for scientific research. 	<p><i>Air, Viewsheds, Night Sky, Noise, Soils, Water:</i></p> <ul style="list-style-type: none"> Staff review and comments on adjacent project proposals, as they become aware of them. No systematic monitoring of air, night sky, noise, soils, or water currently underway. Water rights records in Sacramento have been searched to identify outstanding water rights. The National Park Service has taken steps to convert water rights in Mojave from BLM to NPS records. <p><i>Paleontology:</i></p> <ul style="list-style-type: none"> The park has initiated efforts to gather information on known paleontological sites and create a database of such 	<ul style="list-style-type: none"> All the subjects covered under this general topic heading are the same as alternative 1, the proposed general management plan.

Table 1: Summary of Proposed General Management Plan and Alternatives

	ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
	<ul style="list-style-type: none"> • All specimens collected from the park would be appropriately curated and have adequate documentation of the specimen, the locality, the geologic context, and other pertinent data. • Where appropriate, the resources would be managed for public enjoyment and interpretation in accordance with park management objectives and approved resource management plans. <p><i>Geology:</i></p> <ul style="list-style-type: none"> • Mojave would inventory, preserve and protect geologic resources as integral components of the natural systems, including both geologic features and geologic processes. • The park would work with partners to assess the impacts of natural processes and human-related events on geologic resources; maintain and restore the integrity of existing geologic resources; integrate geologic resource management into park operations and planning; and interpret geologic resources for park visitors. • Mojave would protect geologic features from the adverse affects of human activity, while allowing natural process to continue. <p><i>Caves:</i></p> <ul style="list-style-type: none"> • Mojave would manage caves in a manner that protects the natural conditions such as drainage patterns, airflow, and plant and animal communities. • Atmospheric, geologic, biological, ecological, and cultural resources would be addressed and managed in accordance with approved cave management plans. • The National Park Service would work cooperatively with California Department of Parks and Recreation on cave resources found at Providence Mountains State Recreation Area. • NPS management direction is to avoid constructing developments in caves and to perpetuate natural conditions, while seeking to protect the resource. 	<p>sites.</p> <ul style="list-style-type: none"> • Scientific research conducted by entities other than National Park Service. <p><i>Geology:</i></p> <ul style="list-style-type: none"> • Park geologists devote some of their time and expertise to the establishment of a geological inventory and monitoring program. <p><i>Caves:</i></p> <ul style="list-style-type: none"> • No activity is currently underway on cave resources. 	
<i>Biological Resources</i>	<p><i>Flora:</i></p> <ul style="list-style-type: none"> • Mojave would seek to perpetuate native plant life as critical components of natural desert ecosystems. • Mojave would seek to develop a complete inventory of all floristic 	<p><i>Flora:</i></p> <ul style="list-style-type: none"> • A checklist of plants that are known to occur in the Preserve has been developed identifying 803 species in 85 families. 	<ul style="list-style-type: none"> • All the subjects covered under this general topic heading are the same as alternative 1, the proposed general management plan, except for desert tortoise and burros.

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	<p>components and establish monitoring programs to serve as early warning systems for health of the system.</p> <ul style="list-style-type: none"> Plants and plant communities would be manipulated only when necessary to achieve approved management objectives. To the maximum extent possible, plantings would use seeds, cuttings, or transplants representing species and gene pools native to the ecological portion of the park in which the restoration project is occurring. Use of exotic plant species is restricted to situations that conform to the exotic species policy. Plants and plant communities may be manipulated to maintain habitat for threatened or endangered species. <p><i>Fauna:</i></p> <ul style="list-style-type: none"> The NPS management goal would be to preserve and protect native wildlife and their natural habitat in a manner that would result in self-sustaining populations of native species. The NPS policy is to maintain all components and processes of naturally evolving park ecosystems, including the natural abundance, diversity and ecological integrity of all native species. The park would not promote actions that would attempt to solely preserve or enhance populations of individual species (except threatened and endangered species). Intervention in natural processes would only be undertaken: (1) when directed by Congress, (2) in emergencies when human life and property are at stake, or (3) to restore native ecosystem functioning that has been disrupted by past or ongoing human activities. <p><i>Sensitive Species:</i></p> <ul style="list-style-type: none"> The National Park Service would identify, inventory, monitor and promote the conservation of all federal, state and local listed or proposed threatened or endangered species, rare, declining, sensitive, or candidate species and their critical habitats. The National Park Service would control visitor access to and use of critical habitats and might limit access to especially sensitive areas. Active management programs would be 	<ul style="list-style-type: none"> A general vegetation map has been generated using digital data from UC Santa Barbara. A more detailed vegetation map of the Mojave Desert is nearing completion by the Biological Resources Division of USGS, which includes mapping of sensitive habitats. <p><i>Fauna:</i></p> <ul style="list-style-type: none"> A generalized list of fauna in the Preserve identifies about 300 species of wildlife, including 36 species of reptiles, 200 birds and 47 mammals utilizing 35 habitat types. Insects are not well documented. Currently, the NPS has no active wildlife program; however, a wildlife biologist is being hired in fiscal 2000. CDF&G routinely conducts bighorn sheep counts and monitors the mule deer population. Researchers at Soda Springs and Granite Mountains routinely conduct a variety of wildlife investigations. <p><i>Sensitive Species:</i></p> <ul style="list-style-type: none"> A preliminary list of species of special concern has been assembled. 	

Table 1: Summary of Proposed General Management Plan and Alternatives

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	<p>conducted as necessary to perpetuate the natural distribution and abundance of threatened or endangered species and the ecosystems on which they depend.</p> <ul style="list-style-type: none"> • All management actions for protection and perpetuation of special status species would be determined through the Preserve's resource management plan. • The National Park Service would develop collaborative partnerships with federal, state, and local agencies that manage lands adjacent to Mojave National Preserve, and with academic institutions with research capabilities in desert ecology or ecosystem management to help achieve these goals. <p><u>Desert tortoise:</u></p> <ul style="list-style-type: none"> • National Park Service would implement measures in the Desert Tortoise Recovery Plan to protect the desert tortoise. • Signing of heavily traveled roads. • No new roads in critical habitat. • Temporary closures of roads as necessary. • Eliminate unnecessary rights-of-way • Actively restore disturbed lands. • Prioritize critical habitat for acquisition. • Develop extensive educational materials and programs. • Adopt minimum impact fire suppression policies. • Support fire effects research. • Eliminate hazards from abandoned mine lands. • Eliminate hazards from small game guzzlers. • Eliminate firearms discharge from February through August. • Limit cattle grazing in critical habitat if ephemeral forage is below 230 lbs. per acre. • Continue existing management policies already in effect to protect the tortoise. • Pursue cooperative interagency management actions including coordinated monitoring, trash management, raven studies and barrier fencing along I-15 and I-40 through critical habitat. • Tortoise and its habitat would be protected throughout the park, regardless of the habitat designation. • The National Park Service proposes that all category one tortoise habitat within 	<p><u>Desert Tortoise:</u></p> <ul style="list-style-type: none"> • The desert tortoise and its critical habitat are managed indirectly through other activities and resources such as hunting, grazing, burros, and other land uses. • Numerous actions required by Recovery Plan are already implemented as a result of park regulations and policies. • The USFWS has issued a programmatic biological opinion to Mojave for small project activities in desert tortoise habitat allowing certain specified activities and a minimal amount of disturbance to occur without the need to formally consult with the USFWS on each action. • Two biological opinions have also been issued by the USFWS for cattle grazing in desert tortoise habitat. • Consultation with the USFWS on other activities on park lands that may affect the desert tortoise and other listed species occurs for each activity. • Monitoring locations and frequency are being developed in consultation with tortoise biologists, the USFWS, and the BLM, and funding to support an interagency, desert-wide monitoring team has been 	<p><u>Desert Tortoise:</u></p> <ul style="list-style-type: none"> • In addition to the management actions already implemented (see alternative 1), the NPS would adopt the following policies and seek funding, where necessary, to implement them: • Designate category I habitat as "Desert Wildlife Management Areas" (DWMA) • No dogs off leash in DWMA's • Permanently reduce speed limits in Preserve to 45 mph • Close and restore 100 miles of dirt roads in DWMA's • Interagency management actions same as proposed, except: • Seek permit from USFWS to begin immediate selected raven removals in DWMA's. • Designate grazing permit areas in DWMA's as ephemeral pastures only.

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	<p>the Preserve be considered as the areas that contribute to desert tortoise conservation under the Recovery Plan.</p> <ul style="list-style-type: none"> • Recommends that the USFWS modify critical habitat boundaries to coincide with category one desert tortoise habitat as mapped by tortoise biologists. <p><u>Mohave tui chub:</u></p> <ul style="list-style-type: none"> • A cooperative agreement between the National Park Service and California State University would identify management objectives and strategies for maintaining the Mohave tui chub population (such as cattail and other aquatic plant removal and dredging of the pond). • Mojave would pursue cyclic funding to provide for continued maintenance of the ponds and monitoring of the population. <p><u>Bighorn sheep:</u></p> <ul style="list-style-type: none"> • The park management goal would be to conserve and protect a self-sustaining population of bighorn, while allowing hunting as mandated by Congress. Research to determine the need for guzzlers and predator control would be encouraged and supported. • Research is needed to determine potential conflicts with rock-climbing on Clark Mountain, especially during the lambing period. • Research into potential effects of jet noise is also needed due to the threatened development of a major regional airport only miles from the park's northern boundary. <p><i>Sensitive Habitats:</i></p> <ul style="list-style-type: none"> • The park would inventory, monitor, map and protect sensitive or unusual habitats, including coastal sage, white fir stands and Joshua tree woodlands. • Assess long-term effects of grazing and, possibly, how the removal of cattle would effect population dynamics of the Yucca species. • Fire management strategies would consider short and long-term fire effects on components of the Joshua tree community and determine appropriate strategies. • Other unusual plant communities would be inventoried, monitored and studied to 	<p>requested.</p> <p><u>Mohave tui chub:</u></p> <ul style="list-style-type: none"> • The artificial pond population at Soda Springs is periodically maintained in cooperation with USFWS, CDF&G and the California Desert Studies Consortium. No permanent funding exists. • A genetics study was completed in 1997 that determined that the chub was indeed a distinct species, not a hybrid with the exotic arroyo chub. <p><u>Bighorn Sheep:</u></p> <ul style="list-style-type: none"> • A limited number of permits to hunt bighorn sheep are issued each year by the California Department of Fish and Game through a lottery system. • Sheep populations are monitored regularly by the department and the park has assisted with these efforts. 	

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	ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
	<p>determine appropriate management actions (calicolous scrub, sagebrush scrub, shadescale scrub, desert grassland, Kelso Dunes, Mojave yucca, succulents, riparian, mesquite, and smoke tree).</p> <p><i>Introduced Species:</i></p> <ul style="list-style-type: none"> Nonnative plants and animals would not be introduced, except as part of an historic landscape, in accordance with NPS management policies. Management actions, including eradication would be undertaken. <p><u>Burros:</u></p> <ul style="list-style-type: none"> Remaining burros would be removed by a multi-phased approach including capture, adoption, and possible direct reduction of last few animals to reach a zero population level. Mojave would manage the Clark Mountain burros cooperatively with the Bureau of Land Management who maintain an adjacent herd management area, with no natural or constructed barriers to prevent burros from entering this satellite unit of the Preserve. <p><u>Tamarisk:</u></p> <ul style="list-style-type: none"> Mojave would continue to identify and remove nonnative tamarisk (<i>T. ramossissima</i>). Trees planted along the Union Pacific railroad corridor for protection of the tracks from blowing sand are not considered a threat and would not be removed. <p><u>Mule Deer:</u></p> <ul style="list-style-type: none"> No actions to remove this species appear to be warranted. <p><u>Chukar:</u></p> <ul style="list-style-type: none"> No releases of these, or other exotic 	<p><i>Introduced Species:</i></p> <ul style="list-style-type: none"> Nonnative plants and animals would not be introduced, except as part of an historic landscape, in accordance with NPS management policies. Management actions, including eradication would be undertaken. <p><u>Burros:</u></p> <ul style="list-style-type: none"> Efforts to reduce burro populations from 1996 population of over 1,400 animals to previous BLM herd management level of 130 animals through live capture and adoption are made each year. Four capture methods are employed or considered for Mojave's burro program: water trapping, horseback wrangling, helicopter-assisted roping and trapping, and net gunning. Mojave currently utilizes three placement sources for captured burros. Mojave works with BLM to capture burros from the Clark Mountain unit. <p><u>Tamarisk:</u></p> <ul style="list-style-type: none"> Tamarisk eradication efforts would continue as part of interagency efforts. <p><u>Mule Deer:</u></p> <ul style="list-style-type: none"> No inventory or monitoring of the population is occurring by park staff. Population estimates from vehicle surveys and hunt statistics. <p><u>Chukar:</u></p> <ul style="list-style-type: none"> No inventory or monitoring 	<p><i>Introduced Species:</i></p> <ul style="list-style-type: none"> Nonnative plants and animals would not be introduced, except as part of an historic landscape, in accordance with NPS management policies. Management actions, including eradication would be undertaken. <p><u>Burros:</u></p> <ul style="list-style-type: none"> This alternative would be the same as alternative 1, except for the following: To most effectively remove burros from the Clark Mountain area and prevent their future ingress, Mojave would fence the Clark Mountain unit, following the Preserve boundary, using fence design that allow bighorn passage. After the fence is completed, Mojave would follow the three-phased removal strategy in alternative 1 above for the main unit of the Preserve.

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	species, would be authorized. In order to protect the native quail population and to maintain a native desert ecosystem, the NPS would encourage reductions in this population of exotic birds by seeking a higher bag limit, as compared to the native quail population.	of the population is occurring by park staff. <ul style="list-style-type: none"> No actions are being taken at this time to remove this exotic species. 	
<i>Cultural Resources</i>	<ul style="list-style-type: none"> Many of the agency responsibilities and mandates for cultural resources are addressed “Actions Common to All Alternatives.” See this section above for more detail. Develop and implement a systematic applied cultural resource research program to provide baseline data on park cultural resources. Identify, protect, preserve, and interpret archeological resources. The development phase of the ASMIS program would continue with completion anticipated in 2001. Updates to the database would be undertaken as new information becomes available. Update the List of Classified Structures as needed. Undertake and then update the Cultural Landscape Inventory. Inventory, evaluate and nominate eligible properties to the National Register of Historic Places. Develop an ethnography program. Prepare a scope of collections statement and a collection management plan to address and document the management, protection, preservation and use of natural and cultural specimens, object, documents, photographs, and electronic media. Kelso Depot – see Visitor Information below Soda Springs Desert Study Area (Zzyzx) – see Research and Education Centers below Historic ranches – see Ranching Developments below Mojave Road – see Access and Circulation below. Protection of Rock Art – see Recreational Activities below. 	<ul style="list-style-type: none"> Same as proposed action. 	<ul style="list-style-type: none"> Same as proposed action.
FACILITIES AND DEVELOPMENT			
<i>Visitor Information</i>	<i>Information Centers:</i> <ul style="list-style-type: none"> A small information and visitor contact center would be placed at the headquarters building in Barstow to serve the public and specifically to fill the needs of local communities. 	<i>Information Centers:</i> <ul style="list-style-type: none"> NPS operates existing visitor contact centers at Baker and Needles would to serve as the initial visitor contact points, providing the public with 	<i>Information Centers:</i> <ul style="list-style-type: none"> Due to the Kelso Depot not being rehabilitated for use as a visitor center in this alternative, the National Park Service would work with

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	<ul style="list-style-type: none"> Staffed information centers at Baker and Needles would continue to operate with the same focus as at present. The Hole-in-the-Wall visitor contact station would continue to provide information seasonally and serve as a base for interpretive programs such as ranger-led walks and talks. The existing location of the visitor contact station is being evaluated in a separate development concept plan for Hole-in-the-Wall. The park would continue to maintain and enhance web sites on the National Park Service site participate as a partner in an interagency desert-wide visitor internet site. <p><i>Interpretative Facilities:</i> <u>Kelso Depot:</u></p> <ul style="list-style-type: none"> Kelso Depot would be rehabilitated for use as a museum and interpretive facility. The exterior of the building would be restored to its pre-1942 appearance, as would certain interior spaces such as the Beanery, the ticket office, the conductor's room and two overnight lodging rooms. Other spaces inside the depot would be rehabilitated for visitor information displays, natural and cultural exhibits, audiovisual exhibits, an auditorium, public restrooms, publication sales, working space for staff, conference/classroom space, and storage space. Landscaping would be rehabilitated to approximate the historic scene as much as possible, recognizing the need for parking, restrooms and concern for water conservation The Beanery would be restored to be capable of operating as a restaurant at some future time. As components of the Kelso Depot project, the NPS would also: <ul style="list-style-type: none"> Evaluate the town of Kelso for possible nomination as a historic district Seek to acquire (or develop partnerships) the Kelso schoolhouse and general store for possible preservation and interpretation Seek to acquire adjacent private lands to provide adequate space for parking and exhibits and to allow the 	<p>information on desert travel and recreation opportunities.</p> <ul style="list-style-type: none"> The Hole-in-the-Wall visitor contact center is currently the only NPS facility in the Preserve with a staffed ranger presence. Staffing at the ranger station would continue on a seasonal basis and as NPS staff or volunteers were available. The park maintains a webpage on the National Park Service website. Mojave is also a partner in an interagency desert-wide visitor internet site. <p><i>Interpretative Facilities:</i> <u>Kelso Depot:</u></p> <ul style="list-style-type: none"> Funding was provided by Congress in December 1999 to complete the planning, design, engineering specifications, and construction drawings for the restoration and rehabilitation of Kelso Depot. If funding for the restoration of the depot, as addressed in alternative 1, is not provided, the park would seek other funding to stabilize Kelso Depot to protect it from further deterioration and to provide fire and security protection. 	<p>other federal land management agencies to increase the size and function of existing information centers at Baker and Needles.</p> <ul style="list-style-type: none"> A new information center is proposed for the Cima area, in conjunction with a central field operations facility. <p><i>Interpretative Facilities:</i> <u>Kelso Depot:</u></p> <ul style="list-style-type: none"> Minimum funding would be sought only to protect Kelso Depot from fire, earthquakes, and further deterioration. The interior would not be open for use. The depot would be interpreted through exterior exhibits and interpretive panels. Permanent comfort stations would also be added and parking areas better defined. Mojave would place a greater emphasis on Baker as the primary exhibit and interpretive facility, while supporting the Bureau of Land Management and encouraging the bureau to focus on Needles and providing exhibits and information more relevant to BLM managed lands.

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	<p>protection of the cultural landscape of the Kelso area</p> <p>Take necessary steps to secure flood dike to ensure protection of the depot during flood events</p> <p>Install water well and septic system</p> <p>Evaluate possible related interpretation of historic iron ore loading bin and Vulcan Mine</p> <p><u>Zzyzx (Soda Springs):</u></p> <ul style="list-style-type: none"> • A self-guided interpretive and orientation program at Soda Springs would be updated and improved. Interpretive displays and trails may be rehabilitated or replaced with new facilities. • Occasional ranger-led programs may be provided. <p><u>Hole-in-the-Wall:</u></p> <ul style="list-style-type: none"> • The visitor contact center would continue to serve visitors with information and interpretive programs. • A separate development concept plan would be prepared for the entire developed area, under the following guidance: <p>Visitor and administrative facilities would be separated and their footprint on the landscape would be minimized. Sustainable practices would be fully incorporated as buildings are replaced or as opportunities arise.</p> <p>Overnight facilities would be relocated outside of active 100 year flood channels or warning/protective systems installed.</p>	<p><u>Zzyzx (Soda Springs):</u></p> <ul style="list-style-type: none"> • The visitor shade structure, restroom, and parking lot have been reconstructed or replaced to remove structurally unsafe and nonfunctional facilities. • A self-guided trail and some interpretive panels provide some basic information on some aspects of the history and current use. • The park is considering replacement of the interpretive panels and improvements to the self-guided trail. <p><u>Hole-in-the-Wall:</u></p> <ul style="list-style-type: none"> • The existing visitor contact center currently serves visitors seasonally with information and interpretive programs. 	<p><u>Zzyzx (Soda Springs):</u></p> <ul style="list-style-type: none"> • Education and outreach by the National Park Service at the Soda Springs Desert Studies Center would be the same as under alternative 1, except that the interpretive plan might include ranger-guided tours of key features at Soda Springs. • A small facility to support a staffed interpretive program would be built to serve visitors. • Additional interpretive exhibits and day use hiking trails may also be added. • The Preserve may also increase its use of the Soda Springs facilities for visitor and administrative functions. Employee housing may be added to provide onsite protection and maintenance services. <p><u>Hole-in-the-Wall:</u></p> <ul style="list-style-type: none"> • Same as alternative 1.

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	<p>Information would be provided in ways to interpret the natural and cultural history of the area regardless of the staffing of the information center.</p> <p>Disturbed areas would be restored with native vegetation and interpretive information on desert disturbance and restoration would be developed.</p> <p>The existing picnic area and group/equestrian sites would be evaluated for possible relocation.</p> <p>New trail opportunities to expand visitor use activities in the area would be considered.</p> <p><u>Signing and Orientation:</u></p> <ul style="list-style-type: none"> Philosophy on signs would be for them to be unobtrusive, used sparingly, and to blend with the natural environment so that the undeveloped wild character and sense of exploration remains. Maps and other portable media would be utilized to reduce need for signs. Media such as compact disks and audiotapes would be provided to give visitors portable information. Sign plan to be prepared. Maps, newspapers, brochures and site bulletins would continue to be used. <p><u>Way side Exhibits:</u></p> <ul style="list-style-type: none"> A few additional road or trailside interpretive and information displays and wayside exhibits would be developed. 	<p><u>Signing and Orientation:</u></p> <ul style="list-style-type: none"> Existing signs are being evaluated for retention, modification, or removal. Some new signs have been added, and most outdated and worn signs have been replaced. Entrance signs have been constructed at all the major paved entrances, along with information panels to provide basic visitor information and orientation. A park newspaper is produced approximately once a year to provide visitors with basic orientation information, current resource issues, and other data relevant to a visit. Information sheets on camping, hunting and other specific activities are also available. Maps of the Preserve, showing major roads, wilderness, and points of interest, have been produced in various scales. <p><u>Way side Exhibits:</u></p> <ul style="list-style-type: none"> Planning is underway and would continue for roadside pullouts with information displays to orient visitors and provide an overview of major features, including notes on travel safety. 	<p><u>Signing and Orientation:</u></p> <ul style="list-style-type: none"> Same as alternative 1. <p><u>Way side Exhibits:</u></p> <ul style="list-style-type: none"> There would be increased emphasis on way side exhibits and interpretive displays to educate the public on the significant resources in the Preserve. There would be more focus on guided interpretation than

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			<p>in the proposed action.</p> <ul style="list-style-type: none"> • Visitors would receive more direction and information in the field, with less emphasis on exploration and self-discovery than in the proposed action. • Trailhead parking displays would be established as needed.
<i>Developed Campgrounds</i>	<ul style="list-style-type: none"> • Mojave would retain the two existing developed campgrounds at Mid Hills and Hole-in-the-Wall that together provide 61 campsites. • Ongoing improvements to existing campgrounds would continue as described in the existing management alternative. • Campsites and trails in the Mid Hills campground would be redesigned over the coming years to increase the level of accessibility for people with disabilities and to resolve other concerns. • Campsite densities would not be increased. • One new semi-developed campground with fewer services and smaller numbers of campsites (approximately 15) would be considered through a separate planning effort. 	<ul style="list-style-type: none"> • Improvements have been completed at both campgrounds to replace or upgrade restrooms, campsites, and the water systems. • Both campgrounds are open year round with no reservations. • Hole-in-the-Wall campground has a significant level of accessibility for visitors with disabilities. • No expansion of developed campgrounds or creation of new ones is planned. • The state operates a small developed campground at Mitchell Caverns. 	<ul style="list-style-type: none"> • If visitation and demand for campsites increases, the number of campsites in developed campgrounds would be increased, but the density would remain the same. • Locations for a group campsite at or near Mid Hills campground would be examined to provide a cooler alternative in the summer than Hole-in-the-Wall. • To compensate for lost camping opportunities in desert tortoise habitat, the Preserve would develop three additional primitive campgrounds (without water) with 15 sites each.
<i>Research and Education Centers</i>	<p><i>Soda Springs Desert Study Center:</i></p> <ul style="list-style-type: none"> • The NPS is currently negotiating a cooperative agreement with the California State University (CSU) Consortium to manage facilities and provide desert research and education. • The NPS would continue to manage and maintain the visitor facilities. • California State University would continue to maintain all facilities used by them. • Buildings not routinely use by CSU may be considered for park offices or housing, especially where an NPS presence would assist in supporting and protecting facilities. • Historic structures, cultural landscapes, and other cultural resources must be maintained in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. 	<p><i>Soda Springs Desert Study Center:</i></p> <ul style="list-style-type: none"> • The land and buildings are owned by the National Park Service, but managed by California State University (CSU). • A cooperative agreement for the operation and maintenance of the facilities by CSU is being developed. • CSU has constructed new buildings and invested funds over the last twenty years in maintaining existing buildings. • The NPS manages and maintains the visitor contact facility, parking area, restroom, and picnic area, all of which were upgraded and replaced in 2000. • California State University maintains all other facilities, except the main entrance road. 	<p><i>Soda Springs Desert Study Center:</i></p> <ul style="list-style-type: none"> • Same as alternative 1 regarding the use of the site by the research and education community. • See Interpretive Facilities section above for a description of additional NPS facilities and public use proposals.

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	<p><i>Granite Mountains Natural Reserve:</i></p> <ul style="list-style-type: none"> No facilities are located on NPS land. UCR has sole authority for the use and maintenance of their facilities. 	<p><i>Granite Mountains Natural Reserve:</i></p> <ul style="list-style-type: none"> University of California, Riverside (UCR) holds title to 2,200 acres within the 9,000-acre reserve. Housing, classroom facilities, a library and office space is constructed and maintained on UCR land. No facilities are located on NPS land. UCR has sole authority for the use and maintenance of their facilities. 	<p><i>Granite Mountains Natural Reserve:</i></p> <ul style="list-style-type: none"> Unstaffed entry stations would be placed at key entry points to public use areas adjacent to and in the natural reserve. Each station would contain features such as bulletin boards where visitors could get information on the natural reserve's purpose and research activities and resource protection standards for the use of the natural reserve. NPS would work with UCR to monitor use of the natural reserve to determine if adverse impacts related to visitor use are occurring.
<i>Park Support Facilities</i>	<p><i>Headquarters:</i></p> <ul style="list-style-type: none"> NPS is pursuing options for constructing or leasing a new headquarters office in Barstow. <p><i>Field Offices</i></p> <ul style="list-style-type: none"> Additional field offices are needed to provide working space for interpreters, protection rangers, resource and maintenance staff. The specific location and design of these buildings would be addressed in the site specific development concept plans for these areas. Areas of prime consideration include Cima, Kelso, Lanfair Valley and the Hole-in-the-Wall vicinity. Facilities acquired from willing sellers would be evaluated in accordance with NPS policies for adaptive use as administrative sites. <p><i>Maintenance Facilities:</i></p> <ul style="list-style-type: none"> A central maintenance facility is needed in the park to provide storage and work space for maintenance activities. Baker currently serves as the interim central maintenance operation, taking care of most short-term maintenance needs. New facilities such as shops, enclosed storage, and offices might be constructed at the existing yard in Baker. The National Park Service would consider the option of contracting for 	<p><i>Headquarters:</i></p> <ul style="list-style-type: none"> Space is leased in Barstow for headquarters personnel. <p><i>Field Offices:</i></p> <ul style="list-style-type: none"> Office space is provided in Baker, at a building constructed in 1997 A small space is located in the back of the Hole-in-the-Wall information center. An office is co-located in an employee residence in Kelso. The park would continue to pursue funding to construct or lease field office space in the Cima, Kelso, Hole-in-the-Wall, and Lanfair Valley areas. <p><i>Maintenance Facilities:</i></p> <ul style="list-style-type: none"> The maintenance operation is overseen from Barstow, with field offices in Baker and Hole-in-the-Wall. The Baker facility provides the main field office and a small shop. Improvements would continue to be made to this facility to increase its capability to provide maintenance and other 	<p><i>Headquarters:</i></p> <ul style="list-style-type: none"> Same as alternative 1. <p><i>Field Offices:</i></p> <ul style="list-style-type: none"> The park proposes to construct a central field operations facility in the Cima area to provide: office space for resource management, visitor services, and maintenance functions, as well as serve as an information center, maintenance shop and storage area, fire dormitory and garage for fire engines, and employee housing. <p><i>Maintenance Facilities:</i></p> <ul style="list-style-type: none"> A central maintenance facility, consisting of a shop for carpentry, plumbing, and limited vehicle maintenance, offices and both indoor and outdoor storage space, would be constructed in the Cima area. Existing aboveground fuel tanks at Hole-in-the-Wall fire center would be relocated to this site.

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	<p>some maintenance services if it would make economic and practical sense.</p> <p><i>Interagency Fire Center:</i></p> <ul style="list-style-type: none"> • Fire protection services would continue to be managed in cooperation with the Bureau of Land Management. • Facilities for a seasonal interagency fire crew of fifteen, two large fire trucks, and support vehicles and equipment are necessary in close proximity to the historical fire occurrence. • Because of the poor condition of facilities at Hole-in-the-Wall, replacement of the existing structures is being considered in a separate process. <p><i>Employee Housing:</i></p> <ul style="list-style-type: none"> • Most employees are not offered government housing, and must find their own residence on their own based on their assigned duty station location. • Some field positions, such as protection rangers and maintenance staff may be duty stationed at locations inside the park in order to have an onsite presence. • Existing housing units would continue to be maintained and upgraded, as funding is available. • Before renovating existing acquired homes or constructing new housing for employees, the NPS would evaluate the location of the housing and make a determination about whether private housing elsewhere within a one hour drive could serve the same need, and whether the total housing units are the minimum necessary to meet the mission of the National Park Service. • As space permits, some of the upper rooms in the Kelso Depot might be used for temporary overnight lodging for staff, researchers or volunteers conducting fieldwork. Additional housing for employees in the Kelso area would also be pursued to support 	<p>services.</p> <ul style="list-style-type: none"> • The Hole-in-the-Wall operation would be improved somewhat. • Opportunities to co-locate a maintenance shop with a new interagency fire center would be pursued. <p><i>Interagency Fire Center:</i></p> <ul style="list-style-type: none"> • A modular building at Hole-in-the-Wall provides cramped dormitory style housing for the seasonal fire crew, with a separate garage for two engines. • Because of the poor condition of facilities at Hole-in-the-Wall, replacement of the existing structure on the existing site is being considered. • A value analysis process was conducted to consider the advantages of various building designs and site locations. <p><i>Employee Housing:</i></p> <ul style="list-style-type: none"> • A one-bedroom housing unit and a studio apartment are available in the Hole-in-the-Wall area. • The park leases a mobile home in Kelso from Union Pacific railroad to serve as housing and office space for a ranger position. • Six mobile homes are available for employee housing in the Baker compound. • The National Park Service would replace the existing doublewide trailers with constructed units, as funding is available. • NPS employee housing would not be provided in Needles or Barstow, instead employees would have to find housing on the open market. 	<p><i>Interagency Fire Center:</i></p> <ul style="list-style-type: none"> • A new dormitory, kitchen and shower facilities to house a seasonal fire crew of 15 would be constructed in the Cima area, in association with the maintenance shop and information center. • A new garage to house for the NPS and BLM engines would also be constructed, with sufficient storage space for fire fighting equipment. <p><i>Employee Housing:</i></p> <ul style="list-style-type: none"> • The focus of this alternative would be to construct new housing in the Preserve to place field employees closer to their work. • Besides the fire dormitory, employee houses and possibly an apartment complex would be built in conjunction with the central Cima field facility discussed above. • Less emphasis would be placed on rehabilitating existing buildings that the government might acquire by purchase or donation.

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	ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
	<p>programs.</p> <ul style="list-style-type: none"> Housing may also be provided at the Hole-in-the-Wall area as positions are filled and adequate housing within a one-hour drive is unavailable outside the park area. A housing management plan is being prepared to consider the number and types of units necessary to meet the mission of the National Park Service. 		
<i>Access and Circulation</i>	<p><u>Roads:</u></p> <ul style="list-style-type: none"> Same as existing management. A road management plan may be prepared to provide detailed guidance for management of the existing road system. <p><u>Mojave Road:</u></p> <ul style="list-style-type: none"> Mojave Road would remain open for street legal vehicles, mountain bikes, equestrian and hikers. Business permits would be granted for commercial guided tours of the Mojave Road Maintenance would be limited to repairs needed to allow continued vehicle passage in accordance with the Secretary 	<p><u>Roads:</u></p> <ul style="list-style-type: none"> No changes would be made in existing roads. Some limited upgrading of heavily used roads may be undertaken as funds permitted. Vehicle use in the Preserve is limited to street legal vehicles and no offroad driving is permitted, including washes. San Bernardino County maintains the 176 miles of paved roads and 79 miles of dirt roads throughout the Preserve. A cooperative agreement is being developed to delineate maintenance standards and specifications. The NPS maintains graded dirt access roads to the Soda Springs facilities, Kelso Dunes, and Wild Horse Canyon road. Some existing backcountry roads were included in wilderness areas by Congress and are no longer open to motorized use. High-clearance and four-wheel-drive (4WD) backcountry roads would not be maintained by the Preserve or the county. However, emergency repairs might be undertaken by the Preserve staff following flash floods. <p><u>Mojave Road:</u></p> <ul style="list-style-type: none"> The Mojave Road is open for street legal vehicles, mountain bikes, equestrians, and hikers. Camping along the Mojave Road is managed under the restrictions of the Preserve's interim management policies, which cover roadside 	<p><u>Roads:</u></p> <ul style="list-style-type: none"> The National Park Service would assume all maintenance responsibility for park paved roads and the unpaved Cedar Canyon, Black Canyon, and Lanfair Valley roads, if the county was unable or unwilling to continue this responsibility. No changes in the amount of paved roads is proposed. 100 miles of backcountry roads to be closed and restored in desert tortoise critical habitat. <p><u>Mojave Road:</u></p> <ul style="list-style-type: none"> No business permits would be allowed for commercial guided tours of the Mojave Road. A permit system to manage use of the road would be adopted so that the quality of the experience could be protected from problems

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	<p>of the Interior' s Standards for the Treatment of Historic Properties.</p> <ul style="list-style-type: none"> Traditional rock cairns, maps, guidebooks or other media would be the primary guides for route finding. <p><i>Trails:</i></p> <ul style="list-style-type: none"> Backcountry/wilderness management plan would address trail use by hikers, equestrian, bicycles, and disabled, with the goal of providing more diverse recreational opportunities. During the trail planning effort, wilderness roads would be evaluated for restoration or possible conversion to single track hiking trails. All trails would be open for use by hikers and equestrians, except where management problems were identified and restrictions needed to be established. Bicycles are allowed on all roads, but not on single-track trails, offroad, or in designated wilderness. Efforts would be made to create more accessible trails. 	<p>camping, campfires, and other related activities.</p> <ul style="list-style-type: none"> Business permits may be granted for appropriate commercial tours on the Mojave Road. No directional signs or interpretive panels would be installed along the Mojave Road. <p><i>Trails:</i></p> <ul style="list-style-type: none"> Existing roads that are now included within wilderness areas are closed to use by mechanized vehicles, but open as hiking and equestrian trails, including use by wheelchairs in accordance with NPS policy. These roads would be evaluated for restoration or conversion to single track hiking trails. Funding was received in FY00 to convert one of these wilderness routes to a trail. This project is undergoing separate planning and compliance. 	<p>associated with too many vehicles on the road at a time.</p> <ul style="list-style-type: none"> A limit on the number of vehicles allowed to travel the road each year would be established based on an evaluation of the condition of social, cultural, and natural resources. <p><i>Trails:</i></p> <ul style="list-style-type: none"> This alternative would focus on providing more day use hiking opportunities for the visitor that are accessible from maintained roads. The backcountry /wilderness management plan would address the type and intensity of trail development, including the number of signs, trails, and trailheads, long distance trails and maintenance. All trails would be open for use by hikers and equestrians, except where management problems were identified and restrictions needed to be established. Two new trail opportunities developed mostly from existing roads, rather than new disturbance, are proposed to proceed immediately.
<i>Rights-of Way and Easements</i>	<ul style="list-style-type: none"> Funding would be pursued to allow for additional research and record checking to adequately document all the existing rights-of-way/easements and develop an administration plan. Mojave would convert existing rights-of-way to NPS standards and regulations wherever possible, and collect annual fee/rental collection. Mojave would seek to eliminate unnecessary or unused rights-of-way or relocate them outside the park as appropriate. Agreements would be sought where necessary to protect resources. <p><i>Railroads:</i></p> <ul style="list-style-type: none"> If Amtrak resumes passenger train service, the NPS would work to place 	<ul style="list-style-type: none"> An estimated 125 rights-of-way and/or easements within the Preserve. Research and record checking is being conducted as time permits to adequately document all the existing rights-of-way/easements. BLM collects and retains all annual fees/rentals associated with rights-of-way/s/easements in the Preserve. <p><i>Railroads:</i></p> <ul style="list-style-type: none"> Union Pacific railroad traverses the center of the 	<ul style="list-style-type: none"> This alternative is the same as alternative 1.

Table 1: Summary of Proposed General Management Plan and Alternatives

	ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
	<p>NPS interpreters on trains and allow passengers to stop at Kelso Depot.</p> <ul style="list-style-type: none"> • The NPS would also support and encourage train stops at Barstow and Nipton, CA, and at Primm, NV. • The park would pursue cooperative agreements with UP to address issues such as spill response, emergency operations, permitting, maintenance of dikes that extend onto federal lands, use of pesticides and herbicides, and other relevant issues. <p><i>Roads:</i></p> <ul style="list-style-type: none"> • Same as existing management. 	<p>Preserve for 91 miles. This 200-foot wide railroad right-of-way (ROW) was granted by Congress in 1875.</p> <ul style="list-style-type: none"> • The railroad is a major regional freight corridor to southern California, servicing as many as 30 freight trains per day. • Union Pacific also owns land in the Kelso Depot area and houses a small crew there in several mobile homes. • Union Pacific is currently pursuing permits to construct a second set of tracks parallel to the existing set, extending from Kelso Depot to Cima. • This project would allow the return of Amtrak passenger service from Los Angeles to Las Vegas. • Review of this double tracking proposed is occurring under separate compliance. <p><i>Roads:</i></p> <ul style="list-style-type: none"> • The county of San Bernardino contends that all established roads in the Preserve are valid RS-2477 rights-of-ways. RS-2477 assertion determinations are not planning decisions. 	
<i>Wildlife Guzzlers</i>	<ul style="list-style-type: none"> • Use and need for all big game and small game guzzlers. Guzzlers would be retained for native wildlife if they were found to be necessary to replace water lost due to actions taken by previous human activities. • Guzzlers in wilderness would also be examined in light of the restrictions in the Wilderness Act on structures and installations. • National Park Service would begin restoring self-sustaining natural water sources. • If retained, small game guzzlers would be modified to ensure that desert tortoise are able to escape from them. • Motorized access to guzzlers in wilderness would be considered extraordinary and would not be routinely allowed unless unusual circumstances 	<ul style="list-style-type: none"> • Approximately 130 small game and six big game guzzlers were installed throughout the Preserve by agencies and interest groups over the last 60 years. • Maintenance of existing guzzlers is provided for with the superintendent's approval. • Motorized access to guzzlers in wilderness for the purpose of maintenance or replenishment of water is reviewed individually. 	<ul style="list-style-type: none"> • This alternative is the same as alternative 1.

	ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
	warranted it.		
<i>Ranching Developments</i>	<ul style="list-style-type: none"> During the grazing management plan development, specific detailed lists and maps of the locations, ownership and maintenance responsibility of these developments would be prepared. If and when a grazing permit is purchased and retired, most ranching developments would be removed following cultural resource analysis. Some developments may be retained as important features of the ranching history of the area. Others may be retained if necessary for wildlife purposes, or where needed for other park resources management purposes. 	<ul style="list-style-type: none"> Ranching developments were installed throughout the Preserve over the last 100 or more years. Hundreds of miles of barbed wire fences and water pipelines, as well as dozens of cattle guards, windmills, water tanks, troughs, corrals, earthen reservoirs, houses, barns, sheds and other structures exist to support the ranching operations. Most of these facilities were installed by and are the property of the rancher, who has sole responsibility for the maintenance. Some fences, water tanks, pipelines, and windmills are the property of the National Park Service, the county or Caltrans (along I-15 and I-40) and are maintained by those entities. Replacement or major repairs are provided for with the superintendent's approval. Motorized access to sites in wilderness for the purpose of maintenance or replenishment of water is reviewed individually. 	<ul style="list-style-type: none"> This topic is the same as alternative 1, except for the potential of moving some developments where it may be beneficial for the desert tortoise or other resource management goals.
USE OF THE PRESERVE			
<i>Recreational Activities</i>	<ul style="list-style-type: none"> National Park Service would not allow recreational activities that are inconsistent with Preserve mission, would cause unacceptable impacts on visitors or resources, or would pose a safety hazard. <p><i>Rock-Climbing:</i></p> <ul style="list-style-type: none"> Management goal would be to allow climbing in a manner that would not significantly impact park resources. The Preserve would promote clean climbing techniques to protect natural and cultural resources, wilderness values and other visitor's experience. Power drill use would be prohibited throughout Mojave. Chipping of rock faces and gluing of holds onto the rock would be prohibited, as would intentional removal of 	<ul style="list-style-type: none"> NPS does not allow recreational activities that are inconsistent with Preserve mission, would cause unacceptable impacts on visitors or resources, or would pose a safety hazard. <p><i>Rock-Climbing:</i></p> <p>This alternative is the same as alternative 1, with the following exceptions:</p> <ul style="list-style-type: none"> Power drill usage is allowed in all non-wilderness zones without a special use permit. Climbing at Clark Mountain is not currently limited due to bighorn sheep activity. The entire Preserve is open to climbing and fixed anchors. 	<p><i>Rock-Climbing:</i></p> <p>This alternative would be the same as alternative 1 with the following exceptions:</p> <ul style="list-style-type: none"> Power drills in non-wilderness areas would be allowed under permit. All wilderness areas within Mojave would be closed to any further placement of bolts and other types of fixed anchors. Fixed anchors in wilderness

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	<p>vegetation from climbing routes.</p> <ul style="list-style-type: none"> • Climbing would not be permitted within 500 feet of any prehistoric or historic rock art site or other cultural resource. • Existing bolts and other fixed anchors that are deemed unsafe by climbers could be replaced on a piece-by-piece basis. • Mojave would study climbing impacts on sheep, and if necessary, impose seasonal closures on visitation to Clark Mountain in order to protect the bighorn. • UCR prohibits rock-climbing on their lands in the Granite Mountains Natural Reserve because they consider this use to be incompatible with their scientific mission and due to the potential for damage to long-term research plots. • The NPS would discourage multiple social trails and heavily impacted zones at the base of climbs, and would employ barriers, revegetation, and possible closures as a means to prevent these impacts. <p><i>Hunting, Fishing, and Trapping:</i></p> <ul style="list-style-type: none"> • The goals of the proposal are to provide better protection to desert tortoise and other park resources, enhance visitor safety and to strike a balance with the mission of the park, which is preservation of resources. • Hunting would generally follow existing California Department of Fish and Game (CDF&G) regulations, except the National Park Service would work with CDF&G and promulgate special regulations: <ul style="list-style-type: none"> Hunting would be limited to small game, upland game birds, and big game during their designated CDF&G seasons, which mostly occur between September and the end of February. The hunting season for Mojave would be from September 1 to January 31(except through the first Sunday in February for bighorn sheep). This is the same season as the Providence Mountains State Recreation Area. Use of hunting dogs would be allowed in accordance with state hunting regulations, and to protect visitors and wildlife, dogs must be in the owner's control at all times. For public safety, shooting of rifles 	<p><i>Hunting, Fishing, and Trapping:</i></p> <ul style="list-style-type: none"> • Hunting, fishing, and trapping are allowed in accordance with the California Desert Protection Act under CDF&G hunting regulations. • Trapping follows California's 1998 Proposition 4. • In very limited circumstances the superintendent may allow trapping by designated individuals to remove (trap or shoot) animals (that are a hazard to visitors or park resources) to discharge the duties of the service. • The collection of non-game birds, reptiles, amphibians, and invertebrates is only permitted under NPS regulations with a valid NPS scientific collection permit. • Plinking (random target shooting) is not permitted 	<p>would only be allowed if: they currently exist, if they are placed as a rappel anchor at the top of a route, or if they are an in-kind replacement of an existing bolt or anchor for safety purposes.</p> <ul style="list-style-type: none"> • Climbing at Clark Mountain would be seasonally closed during bighorn sheep lambing season (February – June) upon the signing of this general management plan. • Mojave would study climbing impacts on sheep, and if warranted, lift the seasonal restriction. • The area within 500 feet of the Hole-in-the-Wall visitor center would be closed to technical rock-climbing. <p><i>Hunting, Fishing, and Trapping:</i></p> <ul style="list-style-type: none"> • This alternative is the same as alternative 1, except there would be no restrictions on species hunted or trapped. • However, no hunting would be allowed from February through June in accordance with the recommendation of the desert tortoise recovery plan. • Dogs could be used in accordance with CDF&G regulations, outside desert tortoise critical habitat. No dogs would be permitted off lease within desert tortoise critical habitat.

	ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
	<p>would not be allowed within one mile of Mid Hills campground; the Hole-in-the-Wall campground, visitor center or fire center; Kelso Depot; Cima; Piute Creek; the Soda Springs Desert Study Center; and Granite Mountains Natural Reserve.</p> <p>CDF&G regulations would apply regarding shooting near buildings and paved roads.</p> <p>Plinking (target or random shooting) is not allowed anywhere in the Preserve.</p> <ul style="list-style-type: none"> • Trapping and fishing are the same as existing management. <p><i>Hiking:</i></p> <ul style="list-style-type: none"> • The backcountry/ wilderness management plan would address trail use by hikers, equestrians, bicycles, and visitors with disabilities. <p><i>Equestrian Use:</i></p> <ul style="list-style-type: none"> • Same as existing management. <p><i>Bicycling:</i></p> <ul style="list-style-type: none"> • Same as existing management. • The backcountry/ wilderness management plan would consider the feasibility of designating dirt roads as bicycle routes. <p><i>Motorcycles and ATVs:</i></p> <ul style="list-style-type: none"> • Same as existing management. <p><i>Aircraft:</i></p> <ul style="list-style-type: none"> • Same as existing management. 	<p><i>Hiking:</i></p> <ul style="list-style-type: none"> • Hiking is allowed throughout the Preserve, both on developed trails and cross-country. <p><i>Equestrian Use:</i></p> <ul style="list-style-type: none"> • All trails are open for use by equestrians, except where management problems are identified and restrictions need to be established. • Horses may travel cross-country. <p><i>Bicycling:</i></p> <ul style="list-style-type: none"> • Bicycles may be used on all open roads, but not on single-track trails, in wilderness, or off existing roads. <p><i>Motorcycles and ATVs:</i></p> <ul style="list-style-type: none"> • Street legal, licensed motorcycles are permitted on open roads in the Preserve. • All terrain vehicles (ATVs) such as three-wheelers and four-wheelers are not permitted. • Motorcycles must have mufflers that permit normal conversation when the engine is idling. <p><i>Aircraft:</i></p> <ul style="list-style-type: none"> • There are no designated airstrips in the Preserve on public lands. Landing of aircraft on roads, dry lakes, or other areas of the Preserve is not allowed. 	<p><i>Hiking, Equestrian Use, Bicycling, Motorcycles and ATVs, Aircraft, Backcountry Use and Roadside Vehicle Camping, Visitor Use Fees</i></p> <ul style="list-style-type: none"> • Same as alternative 1.

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	<p><i>Backcountry Use and Roadside Vehicle Camping:</i></p> <ul style="list-style-type: none"> Roadside vehicle camping would continue to be allowed only in previously used areas along open routes of travel, outside of wilderness, under same restrictions as existing management. To protect sensitive resources, some campsites may be closed and camping activities relocated elsewhere. Mojave would inventory previously used campsites and prepare a backcountry/wilderness management plan. Resource conditions and visitor use would be monitored at certain locations to determine need for sites. Limit camping in high use areas to designated campsites, per previous BLM direction. Backcountry campers may camp anywhere, except designated no camping areas, but must erect their tent out of sight of paved roads. Some areas are designated as no camping to avoid the potential conflict between day use recreational visitors and camping use. Efforts would be undertaken to ensure that backcountry camping use does not disturb desert tortoise. Backcountry structures on public land would remain open for public use unless problems related to visitor health and safety are identified. <p><i>Groups and Organized Events:</i></p> <ul style="list-style-type: none"> A permit is required for all organized events in the Preserve, and for group activities over a certain size. Organized events may include school groups, hiking clubs, jeep tour groups, bicycle rides, motorcycle clubs, hunting clubs, scouting groups, and other similar types of group gatherings. <p><i>Visitor Use Fees:</i></p> <ul style="list-style-type: none"> Same as existing management, except as 	<ul style="list-style-type: none"> Use of private aircraft must be in accordance with FAA regulations, which provide for a recommended minimum altitude over parks of 2,000 feet. <p><i>Backcountry Use and Roadside Vehicle Camping:</i></p> <ul style="list-style-type: none"> Roadside vehicle camping is allowed along open routes of travel, outside of wilderness, in previously used sites. Vehicles may not leave the road surface at any time and park on undisturbed vegetation. The creation of new campsites is prohibited. Collecting firewood is not allowed in the Preserve. Campfires are allowed in existing fire rings or in portable fire pans. Most backcountry structures on public land are available for public use with no restrictions. The Preserve would monitor use of the backcountry and may impose restrictions at heavily used areas to prevent resource damage. No restrictions are in place regarding camping in desert tortoise habitat. However, restrictions could be imposed where research or observations suggest that human activities may threaten the desert tortoise. <p><i>Groups and Organized Events:</i></p> <ul style="list-style-type: none"> All organized events and group activities occurring in the Preserve are required to obtain a permit. <p><i>Visitor Use Fees:</i></p> <ul style="list-style-type: none"> No entrance fees are being collected or considered. 	<p><i>Backcountry Use and Roadside Vehicle Camping:</i></p> <ul style="list-style-type: none"> Same as alternative one except as addressed below: Heavily used areas informal campsites may be improved by such additions as metal fire rings and picnic tables at each campsite, except along the Mojave Road. Other improvements such as restrooms and vehicle barriers might be added later to reduce adverse impacts on natural resources. These areas usually would not have water, trash receptacles, or paved roads. In sensitive areas designated as critical habitat for the desert tortoise, vehicle-based roadside camping would be confined to a limited number of designated campsites with metal fire rings or campsite markers to identify them for use. Previously used areas would be considered first for designation. The designation of campsites would come after an inventory of natural and cultural resource conditions and existing campsites to determine the best locations. Campsites would be considered closed unless designated.

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	<p>follows:</p> <ul style="list-style-type: none"> • Preserve would explore options for increasing fee collection revenues consistent with Congressional direction. • A fee study would determine feasibility of collecting entrance fees. 	<ul style="list-style-type: none"> • Camping fees are collected at Hole-in-the-Wall and Mid Hills campgrounds. • Fees are also collected for special use permits (such as filming, organized group outings, etc.). 	
<i>Commercial Activities</i>	<p><i>Mineral Development:</i></p> <ul style="list-style-type: none"> • Same as existing management. 	<p><i>Mineral Development:</i></p> <ul style="list-style-type: none"> • Mineral development activities are managed under existing laws and regulations applicable to such activities. • Congress established Mojave with the provision that mining activities may occur on valid existing claims under all applicable laws and regulations administered by the National Park Service. • The regulations governing mining on all patented and unpatented claims in park units are found at 36 CFR Part 9A. • NPS regulations require operators to file a plan of operations for all mineral related activities. • Proposed mining operations must also meet the approval standards provided in the regulations and post a performance bond equivalent to the cost of reclamation before an operation may proceed • No specific mining is authorized by this plan. • Each mining proposal is required to submit a detailed mining and reclamation plan and undergo separate environmental impact analysis. • Consultation for listed species and cultural resources would occur at that time. • When mining is authorized, full reclamation of the site is required upon cessation of mining activity. • The park has certified mineral examiners and is determining valid existing rights and, if necessary, to 	<p><i>Mineral Development:</i></p> <ul style="list-style-type: none"> • Same as existing management. • A sensitive resource analysis based on an objective analysis of physical, biological, cultural and visitor use values relative to projected mining impacts would be conducted. • The results of this analysis would be used to identify areas of the Preserve where mineral development would be inconsistent with the mission of the Preserve and likely mineral development may not be able to meet 36 CFR Part 9A or 9B approval standards.

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	<p><i>Cattle Grazing:</i></p> <ul style="list-style-type: none"> • Mojave's overall management goal is to achieve the permanent retirement of grazing. • The Preserve would work with conservation organizations to facilitate the purchase grazing permits and/or fee property from willing sellers. Once a grazing permit was purchased and the new owners (i.e. conservation organizations) requested retirement, it would be permanently retired. Cattle livestock grazing would no longer be an authorized use in retired areas for any reason. • Purchase of base property from willing sellers is a priority over other acquisitions, in accordance with CDPA direction. • The privilege of grazing cattle on park lands would otherwise continue to be exercised at no more than the current level (as of October 31, 1994), subject to applicable NPS regulations and policies, and relevant FWS Biological Opinions. • NPS would allow appropriate maintenance of existing range developments. • If ranchers notify the superintendent of their willingness to sell base property, the superintendent would immediately notify the Secretary of the Interior of the priority acquisition and request Land and Water Conservation funding from Congress (per Sec. 510 of CDPA). • Where credible, published research 	<p>conducting validity examinations to determine if a valuable, economic discoveries of mineral exist on the claims.</p> <ul style="list-style-type: none"> • The National Park Service regulates mineral development on valid nonfederal oil and gas interests in accordance with 36 CFR Part 9B. • Whenever a proposed mineral development fails to meet the regulatory approval standards and no alternative development scenario is feasible, the National Park Service would initiate acquisition of the mineral rights. <p><i>Cattle Grazing:</i></p> <ul style="list-style-type: none"> • Grazing is permitted in the Preserve by the CDPA at no more than levels on October 31, 1994. • Special use permits were issued to ranchers for continuation of grazing cattle on portions of ten previous BLM grazing allotments that are now partly or wholly within the boundary of the Preserve. • The allotment boundaries, animal unit months (AUM), and the rules and restrictions (season of use, supplemental feeding, forage utilization levels) are the same as those that existed when the BLM managed the area. • The NPS monitoring of the range or ranchers' compliance with permit conditions is currently limited. • The rancher's pay grazing fees to the National Park Service based on the BLM fee schedule (\$1.35/AUM or a total for all 10 allotments of about \$50,000/year). • Grazing is allowed under existing USFWS Biological Opinions on the tortoise that were issued to BLM and 	<p><i>Cattle Grazing:</i></p> <ul style="list-style-type: none"> • Same as alternative one, except: • Category I critical habitat would be converted to ephemeral pastures. • Cattle would not be allowed to graze until ephemeral forage reaches 230 lbs./acre.

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	<p>studies demonstrate that grazing is negatively impacting the desert tortoise, appropriate mitigation measures would be taken.</p> <ul style="list-style-type: none"> Any permit that is not retired would be managed pursuant to an NPS grazing management plan. Grazing would not be allowed where perennial plant utilization exceeds 30%. Grazing shall be curtailed to protect perennial plants during severe or prolonged drought. Grazing use would be restricted in desert tortoise critical habitat from March 15 to June 15, where ephemeral plant production is less than 230 lbs. per acre. Fees would be charged on a per AUM basis using the same formula as the BLM, plus the costs for NPS review and issuance of a special use permit in accordance with NPS policy. <p><i>Filming:</i></p> <ul style="list-style-type: none"> Same as existing management. <p><i>Visitor Services:</i></p> <ul style="list-style-type: none"> A concession contract to operate a small food service facility in the Kelso Depot is being considered. No other food service facilities are being considered on park lands. The park would not develop lodging facilities for visitors on park lands, but would rely on gateway communities to provide these services. Some level of commercial services may be sought in the Kelso Depot, Cima and Hole-in-the-Wall areas to provide compatible recreation services and equipment for visitors. Currently, the park issues permits annually to 2 licensed hunting guides who provide guiding service for bighorn sheep hunts. Commercial towing services that desire to provide service inside the park boundary would need to apply for a commercial use 	<p>terms and conditions of the NPS special use permit.</p> <ul style="list-style-type: none"> The recent purchase of the Granite Mountains grazing permit by the National Park Foundation and its subsequent permanent retirement by the park, resulted in a reduction of grazing in the Preserve by 4,475 Animal Unit Months (AUMs). <p><i>Filming:</i></p> <ul style="list-style-type: none"> A special use permit is required for all commercial filming activities and a fee is assessed. Filming activities are subject to the same rules and regulations as other activities, including no offroad driving. All costs associated with desert tortoise surveys and onsite monitors during filming are borne by the permittee. <p><i>Visitor Services:</i></p> <ul style="list-style-type: none"> No commercial visitor services or concessions contracts exist on park land and none are anticipated. Special use permits are granted individually for commercial services such as guided tours and hunting guide services. 	<p><i>Filming:</i></p> <ul style="list-style-type: none"> Same as alternative 1. <p><i>Visitor Services:</i></p> <ul style="list-style-type: none"> Same as alternative 1.

Table 1: Summary of Proposed General Management Plan and Alternatives

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	license and post a performance bond.		
PLAN IMPLEMENTATION			
<i>Staffing and Budget</i>	<ul style="list-style-type: none"> • Full implementation of all aspects of the proposal would require an additional \$4 million and 49 staff. • Kelso Depot rehabilitation is estimated to cost about \$6.3 million. • Total cost of all proposed development and program increases is approximately \$14.5 million, not counting land acquisitions. 	<ul style="list-style-type: none"> • Current operating base budget is \$3.1 million and 43 positions. • Additional non-recurring funds are provided for trail construction, Kelso Depot design, land acquisition, fire suppression, planning, and burro removal. 	<ul style="list-style-type: none"> • This alternative would required an additional \$4 million and 45 staff over the existing levels. • Total cost of all proposed development and program increases is approximately \$14.5 million, not counting land acquisitions.

TABLE 2: SUMMARY OF IMPACTS

ACTIONS COMMON TO ALL ALTERNATIVES
IMPACTS ON MANAGEMENT OF THE PRESERVE
<ul style="list-style-type: none"> • Adoption of this proposal would provide a guidance document for proceeding with additional site-specific planning. • This proposal begins to address carrying capacity by providing desired future conditions. These statements would help future managers determine if those conditions are still being met and also serve to educate the public on conditions and experiences that may be expected in different areas of the Preserve. • The development of a five year Strategic Plan for the Preserve in 1997, and the preparation of annual performance plans and work plans has resulted in resource protection and visitor experience goals being established and projects identified to achieve those objectives. • Preparation of boundary maps and a legal description for the Preserve informs park staff, other agencies, organizations and the public of the specific legal location of the park as established by Congress. • Wilderness would continue to be managed in accordance with current laws, regulations and policies. Any confusion about setbacks and specific locations of wilderness boundaries would be clarified by the legal description. • The current fire policy is to suppress all fires in the Preserve until fire history and effects studies are completed and a fire management plan is written and approved. This policy may not yield the most desirable resource benefits in all areas, but without adequate planning and research no data to support other options currently exists. Development of a fire management plan would provide management options that include full suppression, prescribed fire, natural fire managed to achieve benefits to natural resources, or a combination of these. • Lack of a comprehensive inventory of disturbed lands means little is known about the extent of nonnative invasive species on these lands, the extent and distribution of the disturbance, or the resulting impacts on resources. Completion of an inventory of disturbed lands would provide the data necessary to develop a restoration strategy. • No comprehensive land acquisition program is currently in place, although funding was received in FY 2000 to begin acquiring private land owned by the Catellus Corporation. Exchange of state school sections as called for in the California Desert Protection Act has resulted in 15,066 acres of state lands being converted to NPS ownership and management. Another 36,503 acres is awaiting exchange. An active funded land acquisition program would serve to reduce incompatible development activities on private and state lands and mining claims. • The establishment of partnerships with other land managers, tribal governments, organized groups, universities, and private landowners would accomplish much greater ecosystem sustainability and achievement of park management goals than actions taken solely by park staff. • Sporadic communication with affected tribes occurs primarily on a project-specific basis. This approach often leads to misinformed decision-making and distrust because of a lack of information. The presence of sacred and traditional use areas is not fully identified or understood and therefore might be inadvertently harmed. Effective communication and the sharing of information and knowledge about mutual interests in Preserve planning and operations and in managing cultural and natural resources would foster a better working relationship between the National Park Service and historically affiliated tribes. • The presence of NPS staff at the information center in Needles would continue to provide an opportunity to raise public understanding and appreciation of tribal ties to the Mojave Desert and to foster relationships with the tribes. • Some visitor use may be temporarily affected if closures are requested by tribes to protect the privacy of cultural and religious practices.
IMPACTS ON NATURAL ENVIRONMENT
<ul style="list-style-type: none"> • Lack of resource protection criteria and a comprehensive inventorying and monitoring program results in management of resources with little or no systematic program to determine if adverse impacts are occurring. Adoption of resource protection criteria would provide standards against which activities could be measured. • Adopting a set of guidelines for the built environment would result in facilities that are in harmony with the natural and cultural landscapes. Sustainable use practices would conserve valuable resources and also educate others about conservation. • By monitoring external threats and their potential issues of potential harm early enough in the permitting process for their effects to be addressed and considered. Where appropriate, mitigation would be sought. This process would help to avoid future impacts on park resources.
IMPACTS ON CULTURAL ENVIRONMENT
<ul style="list-style-type: none"> • Archeological resources, historical properties, cultural landscapes and ethnographic resources would benefit from the development of a systematic inventory, research and preservation program. • Baseline data gathering, collection management, compliance responsibilities identified would serve to document the cultural resources of the park. Significant properties would be identified and funding for their stabilization, rehabilitation or restoration sought.

Table 2: Summary of Impacts

ACTIONS COMMON TO ALL ALTERNATIVES		
IMPACTS ON VISITOR USE, SERVICES, AND FACILITIES		
<ul style="list-style-type: none"> Adoption of sustainable design guidelines would ensure the conservation of park resources while providing for maximum visitor enjoyment. Major conflicts with visitor use or resource protection would be identified by participation in the interagency overflight working group and methods identified to mitigate these impacts. 		
IMPACTS ON SOCIOECONOMIC ENVIRONMENT		
<ul style="list-style-type: none"> A separate analysis of socioeconomic conditions in the planning area and the effects of the proposed action was conducted by Dean Runyan Associates under contract to the National Park Service. None of the actions identified under this section would result in any significant impact on the socio-economic environment. Acquisition of private lands would remove those properties from county tax rolls. However, the federal government provides payments to the counties in lieu of taxes to compensate them for their loss of taxes. Payment is computed based on 1% of the amount paid for the property and does not fully replace the lost tax revenue. 		
IMPACTS ON ADMINISTRATIVE OPERATIONS AND FACILITIES		
<ul style="list-style-type: none"> Cooperation and interaction between the National Park Service and the military would provide a forum for communication about issues and concerns, potentially leading to resolutions of concerns before they become conflicts. 		
IMPACTS ON EDUCATION AND RESEARCH		
<ul style="list-style-type: none"> Partnerships to operate and manage two facilities in the Preserve for the purpose of providing education and research would benefit visitors, educational institutes and the NPS. By having cooperative partnership agreements with universities valuable research expertise would be available with direct knowledge of park resources. Educational opportunities would continue for thousands of individuals on desert ecosystems. The proposal would enhance the education and outreach potential of the Preserve by interweaving NPS mission and objectives into the education provided at Granite Mountains and Soda Springs. Sharing of staff and resources would produce gains for both entities that would not be achievable separately. 		
IMPACTS ON LANDOWNERSHIP AND USE		
<ul style="list-style-type: none"> Private lands would be acquired from willing sellers when funds became available. Properties would be purchased at fair market value. Full implementation of this alternative, assuming many of the landowners would be willing to sell, would result in about 170,000 acres of additional public lands being available for visitor use. Reduction of nonfederal ownership would result in fewer instances of visitor trespass problems for private landowners and greater management control of resource use in the Preserve. Proposed development of private land that is incompatible with the purpose and mission of the Preserve, or causes unacceptable adverse impacts, would be opposed by the National Park Service. This policy could frustrate and upset some landowners who prefer to develop their property without governmental interference. Cooperation and interaction between the National Park Service and the military would provide a forum for communication about issues and concerns, potentially leading to resolutions of concerns before they become conflicts. 		
ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
IMPACTS ON NATURAL ENVIRONMENT		
<ul style="list-style-type: none"> Mojave National Preserve's native plant and animal populations would benefit from many of the actions proposed under this alternative. <p>Physical Environment <i>Air Quality/Visibility:</i></p> <ul style="list-style-type: none"> The park would encourage and support air quality data collection and would seek to increase the level of protection by soliciting class I status. This status could protect the air quality of the future by requiring developments that would affect the park to mitigate their emissions. Incremental changes in soil disturbing activities, requiring restoration, removal 	<p>Physical Environment <i>Air Quality/Visibility:</i></p> <ul style="list-style-type: none"> Air quality in the Preserve is typically good, but is often affected by wind-borne dust. Restoration of abandoned mines, removal of mechanized vehicle use from some roads in wilderness, increased enforcement of illegal off-road vehicles, removal of grazing from the Granite Mountains, and 	<ul style="list-style-type: none"> Same as alternative 1 except as noted below.

ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
<p>of burros and not allowing off-highway vehicles, would allow existing scars to heal and reduce particulates, the primary source of air pollution.</p> <ul style="list-style-type: none"> There would be short-term impacts from dust caused by construction activities at Kelso Depot, but mitigation efforts such as watering excavation work would minimize dust levels. Long-term effects on dust generation would be beneficial as parking lots are surfaced. <p><i>Views/heds/Visual Quality:</i></p> <ul style="list-style-type: none"> Overall, the visual quality would improve over the years as standards are adopted and guidelines followed. <p><i>Night Sky:</i></p> <ul style="list-style-type: none"> By adopting standards for use of light on NPS structures, the park would set an example for all developments. However, some continuing degradation of the night sky can be anticipated from external sources, even though the park would work with permitting agencies to mitigate light pollution. <p><i>Natural Ambient Sound:</i></p> <ul style="list-style-type: none"> Initiation of monitoring of natural quiet would provide the necessary data by which to measure changes occurring over time. Measures would be taken prevent or minimize unnatural sounds adversely affecting park resources and values or visitor enjoyment. <p><i>Soils:</i></p> <ul style="list-style-type: none"> Although minor new disturbance would occur for facility development or improvement, such as at Kelso Depot, the overall situation for soils under this alternative would be improvement. Short term negative effects to soils and natural quiet may occur during burro roundups. As non-natives (burros, tamarisk) are removed, natural water flow, wildlife, soils, and vegetation would benefit. The removal of burros and acquisition of grazing permits and removal of cattle would result in no further soil damage and would allow the healing process to proceed. 	<p>removal of 2,354 feral burros would reduce or eliminate some activities that are causing soils disturbance, and resulting in air quality impacts.</p> <p><i>Views/heds/Visual Quality:</i></p> <ul style="list-style-type: none"> Most of the large landscapes in the Preserve offer outstanding visual aesthetics of a natural desert ecosystem. However, modern day intrusions, such as local telephone and electrical lines, surface mines, and ranching developments, into these landscapes do exist. <p><i>Night Sky:</i></p> <ul style="list-style-type: none"> Mojave's night sky is mostly free from light pollution that most urban residents experience. However, light pollution of the night sky is already visible from nearby developments in Primm, Laughlin, and Baker. <p><i>Natural Ambient Sound:</i></p> <ul style="list-style-type: none"> The Preserve is generally a quiet landscape, with occasional, short-term interruptions of the natural quiet. Occasional overflights of commercial jets at cruising altitudes, small private aircraft, and rare military jets at low altitudes may be heard. <p><i>Soils:</i></p> <ul style="list-style-type: none"> Soils are affected to varying degrees by foraging of nonnative burros and cattle, and their subsequent trampling. Soil compaction, sheet erosion, and gully ing are caused by burros wallowing and burro trails. Removal of the AT&T cable line across the center of the Preserve from Ft. Piute to Soda Lake in 1999 resulted in re-disturbance of soils that have been recovering since installation of the cable in 1963. Soils have been disturbed throughout the Preserve as a result of road establishment, mining, utility corridors, and unauthorized off-road 	<p><i>Soils:</i></p> <ul style="list-style-type: none"> Impacts on soils would be the least under this alternative, because burros would be eliminated from the entire Preserve, including the Clark Mountain area. New facility development in the Preserve would be concentrated at one site in the Cima area, thus reducing soil disturbance elsewhere.

Table 2: Summary of Impacts

ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
<ul style="list-style-type: none"> Vehicle use on dirt roads and maintenance activities on maintained roads and utility corridors would continue to disturb soils. <p><i>Water:</i></p> <ul style="list-style-type: none"> As burros were removed and grazing reduced through conservation organization purchase and donation, more water from natural sources would be available for wildlife use and vegetation. Contamination of water sources by burros would be eliminated. Acquisition of grazing permits would include the purchase of the water rights. The National Park Service would convert the right to the name of the United States and utilize the water for wildlife benefit. Drilling a new water well to an estimated depth of 700 feet to support the Kelso Depot would place a small additional demand upon the groundwater. The restoration of the Kelso Depot would result in some floodplain modifications to reinforce the existing flood protection dike. Kelso Depot use as a museum and interpretive facility would place increased demands on water resources. <p><i>Paleontology:</i></p> <ul style="list-style-type: none"> A systematic program of inventory and documentation would provide necessary data for park staff to protect and interpret these resources. Potential new damage to these sites would be reduced as burros are removed and cattle grazing permits are acquired by conservation groups and donated to the park for retirement. <p><i>Geology/Caves:</i></p> <ul style="list-style-type: none"> A systematic program of inventory and documentation would provide necessary data for park staff to protect and interpret these resources. Increased knowledge of these resources would be gained through programs that encouraged research and collaborative partnerships. Continued cooperative relationships with the California Department of Parks and Recreation in the management of Mitchell Caverns would improve interagency knowledge of such resources and expand each agencies expertise by exchanging information and utilizing experienced staff. 	<p>vehicle use, especially in the area immediately east of the BLM's Razor OHV Area.</p> <p><i>Water:</i></p> <ul style="list-style-type: none"> Many natural surface waters (springs and seeps) have been altered to provide water for livestock grazing, mining, and for watering of tamarisk for sand control by the railroad. Artificial watering devices (guzzlers) have been installed throughout the Preserve to provide water for wildlife use. Some guzzlers may be trapping and killing some species of wildlife, especially tortoise, when they enter the tank to drink, but are unable to exit due to a slippery tank wall. Burros contaminate water sources through defecation and urination, overbrowsing or elimination of aquatic and riparian vegetation, and monopolizing use of springs. There is concern about future effects on surface water from significant pumping of groundwater from large-scale developments outside the Preserve. <p><i>Paleontology:</i></p> <ul style="list-style-type: none"> Limited existing knowledge of paleontological resources by most park staff means that little protection is afforded to the sites and little or no public education is occurring. Some unknown vandalism or damage from burros and cattle grazing may be occurring. <p><i>Geology/Caves:</i></p> <ul style="list-style-type: none"> Staff is gathering existing information on park resources. Public education on geological resources via the park website is occurring. 	<p><i>Water:</i></p> <ul style="list-style-type: none"> The impacts addressed under this heading would be the same as the alternative 1, except that water sources in the Clark Mountain would be protected against contamination by burros Drilling for groundwater would not occur at Kelso, but would occur at Cima. Changes to the floodplain at Kelso to armor the existing dike would not occur.

ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
<p>Biological Resources</p> <p><i>Flora:</i></p> <ul style="list-style-type: none"> Native flora would not be subjected to continued grazing pressure from burros as the trapping program continues and a near zero population is achieved by 2002. As conservation group acquisition of grazing permits occurs from willing sellers, cattle would be removed and the vegetation in these areas would no longer be subjected to any grazing pressure from nonnative animals. However, until the permits are acquired and retired, impacts similar to the existing management discussion would continue. <p><i>Fauna:</i></p> <ul style="list-style-type: none"> Competition for food and water with nonnative burros would be eliminated as the burro removal program eliminates the feral burro population. Removal of livestock-watering devices from retired grazing permits may have short-term effects on wildlife populations that are accustomed to utilizing them. However, since ranchers have routinely turned off waters to manage their cattle operations, the effects on wildlife would be minor. Removal of these devices would allow water to remain at the natural source and would create a more natural, self-sustaining desert ecosystem with native populations. Hunting of game species would continue throughout the Preserve, in accordance with state seasons and bag limits. This would result in lower populations of deer, rabbits and quail primarily. Hunting of non-game species, including coyotes, would be discontinued. Increased predation on deer and desert tortoise may occur as coyote and other predator populations increase, resulting in potential declines in their overall populations. Reptile and amphibian populations would 	<p>Biological Resources</p> <p><i>Flora:</i></p> <ul style="list-style-type: none"> Flora is affected to varying degrees by the nonnative burros and cattle foraging and their subsequent trampling of the soil and by camping activities. The interim burro population maintenance program (keeping the herd at the target level of around 130 burros) would result in periodic disturbance to the desert vegetation from inadvertent trampling of vegetation by burros and capture crews during the capture operation. Impacts from burros and cattle, including: damage to soil crusts, reduced water infiltration, inhibit nitrogen fixation in desert plants, provides a favorable seed bed for exotic annuals, soil compaction, and destruction to natural springs and native vegetation. Burros are known to over-browse or eliminate aquatic and riparian vegetation. <p><i>Fauna:</i></p> <ul style="list-style-type: none"> Developed water (wildlife guzzlers, mining and livestock water developments) may be affecting wildlife populations by allowing some to grow to levels unobtainable with available natural water. Bighorn sheep would continue to be inhibited by the presence of burros at springs in areas where burros are not removed. Impacts on desert bighorn as a result of the climbing policies would be similar to those in the proposed action, except that potential impacts on bighorn sheep from the presence of climbers, and to a smaller extent, other visitors, would continue unabated on Clark Mountain. Hunting is allowed year-round with no limits on hares (black-tailed jackrabbits) and many non-game animals such as coyotes, skunks and opossum. The effects on these populations from hunting are unknown. The presence of the nonnative chukar may be having some negative effects on the native populations of quail by occupying habitat and consuming food that these birds would otherwise 	<p>Biological Resources</p> <p><i>Flora:</i></p> <ul style="list-style-type: none"> Impacts on flora would be the least under this alternative, because burros would be eliminated from the entire Preserve, including the Clark Mountain area. <p><i>Fauna:</i></p> <ul style="list-style-type: none"> Water sources in the Clark Mountain area would be improved for wildlife use due to the removal of burros. Desert bighorn sheep would receive a maximum protection, as Clark Mountain would be closed to visitation during lambing season (February– June). This action would reduce potential stress to the population of bighorn that use Clark Mountain. Allowing hunting of non-game species, except during spring months, would result in the continued shooting of coyotes and other predators. This alternative would result in reduced predation on deer and other native species, including tortoise, by coyotes and other predators.

Table 2: Summary of Impacts

ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
<p>benefit from the elimination of random collection without a research permit.</p> <ul style="list-style-type: none"> Removal of the burro population would cause short-term disturbance of wildlife due to noise (helicopters, horses, trucks, wranglers, etc.) during the capture operation. Larger mammals such as deer and bighorn would leave the local area during these activities. <p><u>Desert Tortoise:</u></p> <ul style="list-style-type: none"> Desert tortoise recovery would be enhanced by removing burros, managing grazing per results of research, reducing vehicle related mortality in areas of desert tortoise concentrations, and implementing other Recovery Plan recommendations. Elimination of grazing in critical habitat areas during tortoise active periods, when ephemeral forage is less than 230 lbs./acre or greater, would preserve ephemeral forage for tortoise use during dry or semi-dry years. Tortoise would benefit from this proposal by not having to select less preferred forage with lower protein value during lean years. Education and outreach efforts would improve public knowledge of tortoise life history and impacts, creating an awareness of human caused impacts. Some vehicle related tortoise mortality would continue to occur regardless of mitigating measures implemented. Installation of tortoise barriers in critical habitat areas that are bisected by interstates 15 and 40 paved roads would reduce the threat of vehicle mortality on these high speed, high traffic highways. Actions proposed to reduce raven subsidies would result in less potential for raven populations to remain above the natural levels, thus reducing predation on tortoise. Restoration of disturbed lands in critical habitat areas and acquisitions of private parcels in critical habitat would add habitat for tortoise conservation. Use of minimum impact fire suppression techniques would protect tortoise habitat from damage due to fire fighting. Elimination of predator hunting might result in a slight increase in predation on tortoise, especially vulnerable juveniles. Predation on desert tortoise by native predators would not be viewed negatively, unless the predator populations were artificially maintained 	<p>have available to them.</p> <ul style="list-style-type: none"> The collection of reptiles and amphibians under a California State fishing license is having unknown effects on these populations. For uncommon species, and with no monitoring of the populations by the state or the National Park Service, this practice could be harmful to some species. <p><u>Desert Tortoise:</u></p> <ul style="list-style-type: none"> The continued presence of cattle in desert tortoise habitat during dry years would presumably continue to cause changes in tortoise foraging habits, causing unknown impacts on their health and population. Grazing by burros can damage soil crusts, reduce water infiltration, promote erosion, inhibit nitrogen fixation in desert plants, and provide a favorable seedbed for exotic annual vegetation. USFWS recommended that burros should be removed in areas set aside for the desert tortoise's recovery. The amount of raven predation of tortoise in Mojave has not been quantified, although non-peer reviewed literature reports by Berry (1986) attributes the decline of juveniles from the 1970s to 1990 to raven predation. Cleanup of old landfills and installation of raven-proof trash cans at public use areas assists in preventing ravens from gaining access to human garbage in the Preserve. It is unknown whether these actions will have any significant benefit for the tortoise. The continued use of dogs for hunting in desert tortoise habitat would result in occasional "harassment" of tortoise during the spring and warm fall months when tortoises may be active. Since the use of firearms for hunting is allowed year round in the Preserve, rangers and others would have little way to determine if shooting was legitimate hunting or vandals. Some shooting of tortoise may occur under this alternative, but the number is not predictable. Some mortality due to motorized vehicles has been observed in Mojave 	<p><u>Desert Tortoise:</u></p> <ul style="list-style-type: none"> Designation of critical habitat areas as Desert Wildlife Management Areas would not affect the management of them over the proposed action. Closure of 100 miles of road in critical habitat would prevent potential vehicle mortality and reduce the potential for illegal collection along those routes. Impacts addressed in the proposal regarding developments around the Kelso Depot would be reduced under this alternative.

ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
<p>at unnaturally high levels.</p> <ul style="list-style-type: none"> During the restoration of the Kelso Depot, most construction activities would not affect the tortoise due to the existing compaction and disturbance of the areas to be developed for parking and comfort station installation. Some new disturbance of potential tortoise habitat would occur during the installation of the septic tank and leach field, and the reinforcement of the flood control dike. <p><u>Other Sensitive Species:</u></p> <ul style="list-style-type: none"> Inventory and monitor sensitive species and habitats would improve current knowledge of their distribution and current or potential threats. Maintenance of the Mohave tui chub populations would be assured via a cooperative management agreement with the state. Climbing on Clark Mountain has the potential to impact desert bighorn sheep. Protection of desert bighorn sheep populations would be enhanced by recommended efforts to study impacts of climbing in the Clark Mountain area, and the potential effects of the proposed Ivanpah Valley airport. Some minor, short-term negative effects on bighorn may occur from helicopter use to round up burros in remote locations. Hardening or designation of camping spots in high use and sensitive areas would reduce impacts on natural resources by eliminating the establishment of new campsites reducing the expansion of existing campsites. Closure of some campsites within sensitive habitat would reduce negative impacts on soil, water, other sensitive resources, and the desert tortoise. The creation of semi-developed campgrounds would cause local disturbance to natural resources during construction and after from public use. Use of these campgrounds may reduce impacts on undeveloped areas by relocating visitor activities to semi-developed campgrounds. Construction of roadside pullouts for interpretive displays and a visitor center at Kelso Depot would cause minor soil and plant disturbances. <p><u>Introduced Species:</u></p> <ul style="list-style-type: none"> NPS efforts to identify invasive nonnative 	<p>and would continue under this alternative.</p> <p><u>Other Sensitive Species:</u></p> <ul style="list-style-type: none"> Basic information about the known sensitive species and habitats has been collected. No active program to inventory or monitor these populations has yet been adopted. Several laws, regulations and policies that are part of the designation of the area as a unit of the national park system and the designation of wilderness have substantially increased the level of protection of these species and habitats. <p><u>Introduced Species:</u></p> <ul style="list-style-type: none"> The feral burro population has been 	

Table 2: Summary of Impacts

ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
species and to implement efforts to control or eradicate them would serve to preserve the native Mojave Desert vegetation and prevent loss of native species from nonnative competition.	reduced by 2,354 animals. <ul style="list-style-type: none"> Tamarisk trees have been successfully removed at several riparian areas and efforts continue to eradicate them. 	
IMPACTS ON CULTURAL RESOURCES		
<ul style="list-style-type: none"> Archeological sites, historic properties, cultural landscapes, and ethnographic resources in Mojave National Preserve would benefit from the implementation of a systematic and integrated inventory, research, and preservation program to protect, preserve, and interpret properties. Cultural resources may be adversely affected by vandalism or inadvertent damage resulting from an increase in visitation. Reduced damage to cultural resources with burro removal. Potential reduction of grazing could be viewed negatively by people who view grazing as a historical use. Rehabilitation and partial restoration of the Kelso Depot would result in the stabilization and preservation of this significant historical structure. Adaptive use of other rehabilitated portions of the depot would serve to help preserve the depot, while also making significant areas available for public education and interpretation, exhibits, and administrative use. Installation of earthquake retrofitting, heating and air conditioning, security, and fire control systems would protect the structure from further decay and threat of vandalism or fire. Other potentially significant elements of the Kelso landscape (i.e. schoolhouse) may also be protected and restored. Protection of historic and archeological resources and the cultural landscape at Soda Springs would benefit from actions proposed such as completion of the National Register nomination form, undertaking a cultural landscape and historic structures report, and finalizing a cooperative management agreement with California State University. 	<ul style="list-style-type: none"> Cultural resources are potentially threatened by burro and cattle trampling and by visitor camping or driving near isolated and unprotected sites and vandalism. Historic properties listed on, or determined eligible for the national register would continue to be afforded stabilization/preservation treatment as funding allows. The Kelso Depot would be stabilized and historic landscaping restored. Lack of staff presence means the building continues to be vulnerable to vandalism. Lack of fire protection could result in loss of building. 	<ul style="list-style-type: none"> The impacts of this alternative are the same as alternative 1 except as described below. The Kelso Depot would not be rehabilitated or restored. Funds would be sought to stabilize the structure and prevent further deterioration. However, an empty structure with no use and limited maintenance would probably deteriorate more rapidly. The public would lose the opportunity to enjoy the interior of the structure, as only exterior interpretation would occur. Restricting roadside vehicle camping locations would result in greater protection and less disturbance of existing archeological sites and sensitive cultural sites.
IMPACTS ON VISITOR USE, SERVICES, AND FACILITIES		
<ul style="list-style-type: none"> The policy of minimal signs would provide for a visitor experience that preserves the sense of discovery. Opportunities to see burros in the Preserve would decrease and then disappear after 2002, but native Mojave desert habitat would slowly recover, providing a long- 	<ul style="list-style-type: none"> An increase in the number of vehicles combined with fast speeds would increase the potential for accidents. Number of vehicle/cow and burro accidents would remain about the same, but decline slightly as numbers are reduced. 	<ul style="list-style-type: none"> The impacts of this alternative are the same as alternative 1 except as described below. Opportunities to see burros in the Preserve would be eliminated completely, although areas immediately adjacent on BLM

ALTERNATIVE 1: PROPOSED GENERAL MANAGEMENT PLAN	ALTERNATIVE 2: NO-ACTION (EXISTING MANAGEMENT)	ALTERNATIVE 3: OPTIONAL MANAGEMENT CONCEPTS
<p>term aesthetic benefit. Some visitors would consider the absence of the burros an adverse effect, but others would regard it as a positive effect. If the third phase of the burro elimination plan, killing burros, was carried out, some people would be offended.</p> <ul style="list-style-type: none"> • NPS limits on the number of large groups using the Mojave Road (to reduce conflicts at campsites and avoid possible vehicle congestion) would decrease the availability of sites, but the quality of the camping experience would be improved by a decrease in crowding. • An interpretive plan would result in a coordinated long-range program for interpretive development and direction. • Operating information centers in most gateway communities and rehabilitation and partial restoration of the Kelso Depot and its subsequent use as an information center would increase the number of informed visitors, possibly enhancing their experience and enjoyment of the Preserve. • As visitors received information on low-impact camping and as the maintenance staff managed adverse impacts, soil disturbance and impacts on vegetation from roadside camping would be minimized. • Construction activities at the Kelso Depot would cause short-term adverse effects on vehicle traffic near the construction area and affect people's ability to visit the depot. Minor traffic delays might result from construction work. • Ranger-led tours of Soda Springs would offer more visitor access to and information about the historic properties and the area's history. University operations may be negatively affected if visitor use is uncontrolled. • Public use of the Soda Springs (Zzyzx) area would be enhanced as the interpretive trail and media are updated and improved. No major changes to the research and educational use of the facilities are anticipated. • Site specific planning at Hole-in-the-Wall would improve visitor satisfaction by increasing interpretation, providing visitor information even when the facility is unstaffed, reducing the footprint of the facilities and roadways on the landscape, restoring disturbed areas and possibly adding a new loop hiking trail. • The development of wayside exhibits 	<ul style="list-style-type: none"> • Visitor's experience would be affected by viewing cattle ranching, burros, mining, guzzlers and stock tanks and hunting and trapping activities. • Visitors would potentially experience development activities, such as house building and other facilities on private lands that may appear to conflict with the Preserve's purpose. • Most visitors would continue to enter Mojave without any NPS contact prior to their visit, leaving a large percentage of these visitors with a limited amount of travel, safety or interpretive information. • Installation of entrance signs and information kiosks should increase visitor understanding and safety, and reduce conflicts with private land. • Unlimited use of Mojave Road may adversely affect the condition of the road, and crowding may result at some areas along the road. • If visitation and use dramatically increase, campgrounds may fill up more frequently, leaving some visitors without a place to camp. • Limited public access to historic properties at Soda Springs would continue. • Impacts on the climbing community as a result of existing policies are similar to those in the proposed action with the following differences: <ul style="list-style-type: none"> Fixed anchors and climbing routes are less curtailed because power drills are currently allowed outside wilderness without a special use permit. Clark Mountain climbers are not currently restricted as to their season of use. More potential climbing routes could be developed because the entire Preserve is currently open to climbing and the placement of fixed anchors. • Under this alternative, hunters continue to enjoy taking of big game, small game, and non-game species such as coyote, fox, skunk and other predators, year-round or under state regulated seasons, bag limits and other restrictions. • Visitors leaving gates open or vandalizing ranching developments 	<p>land would remain.</p> <ul style="list-style-type: none"> • Opportunities for visitors to enjoy the Kelso Depot in a partially restored and rehabilitated state would not occur. • Improving of interpretive trails and exhibits would enhance the visitor experience at Soda Springs. • The addition of NPS employee housing would provide increased resource protection and reduce some of the potential vandalism that might occur with increased visitor use. • Limiting backcountry vehicle camping along dirt roads through desert tortoise critical habitat during tortoise active periods would limit some opportunities for vehicle based camping. • Establishing designated camping areas at remote locations would reduce the expanding surface disturbance associated with continued use. • Backcountry campsite improvements would increase the spectrum of camping opportunities in the Preserve. • Limiting vehicle use on the Mojave Road would mean that some visitors might not be able to use the road at their preferred time. The positive effect would be that the quality of the visitor experience and camping along the road would continue to be good. • Placement of fixed anchors in non-wilderness areas using power drills would likely result in very few new fixed anchors. • Climbing at Clark Mountain would be restricted during the spring upon approval of the <i>General Management Plan</i>, until the results of a desert bighorn sheep study were completed. A study could take several years, which would negatively impact climbers using the area. • No climbing would be allowed within 500 feet of the Hole-in-the-Wall visitor center. Impacts of this action would be minor or nonexistent to the climbing community. • Restricting hunting to the September through February

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<p>along paved and maintained roads would enhance the visitor experience along the primary maintained travel routes, while maintaining the sense of discovery in the backcountry.</p> <ul style="list-style-type: none"> • Restrictions on backcountry vehicle camping and day use might cause people to move into areas elsewhere within or outside the Preserve, increasing the level of use and crowding at those locations. • Improving accessibility at some campsites and trails at Mid Hills campground for visitors with disabilities would allow more opportunities for these visitors to use these campgrounds. • Prohibiting power drills would severely limit the number and amount of fixed anchors that would be placed in the Preserve. The overall number of climbing routes within Mojave would thus be minimized, while the quality of the existing and new routes would remain high. • Visitors would experience fewer disruptions and greater safety with the restrictions on the seasons, species, and areas where hunting would be allowed. Eliminating hunting for non-game species would be a negative effect on those hunters. 	<p>have caused increased costs and labor for ranchers to repair the damage and gather cattle.</p>	<p>designated CDF&G seasons for upland game and big game would adversely affect non-game hunters. Allowing the continued hunting of non-game species for about half the year would increase the satisfaction of the hunting community over the proposed action.</p>
IMPACTS ON SOCIOECONOMIC ENVIRONMENT		
<ul style="list-style-type: none"> • A separate analysis of socioeconomic conditions in the planning area and the effects of the proposed action was conducted by Dean Runyan Associates under contract to the National Park Service. • That analysis concluded that no significant effects would occur in the Northern and Eastern Mojave planning area as a result of the proposed action. There would be some loss of grazing related jobs if permits were acquired by conservation groups and retired by the National Park Service, but the overall effect would be offset by an increase in tourism jobs. 	<ul style="list-style-type: none"> • See alternative 1 impacts. 	<ul style="list-style-type: none"> • See alternative 1 impacts.
IMPACTS ON ADMINISTRATIVE OPERATIONS AND FACILITIES		
<ul style="list-style-type: none"> • To fully implement the proposed general management plan over the 10–15 year life of the plan, and assuming that all the activities proposed would be undertaken and visitor use increases, an additional 49 staff would be needed. This would require the addition of approximately \$3.9 million per year for salaries, benefits, and administrative expenses (space, utilities, vehicles, etc.). • The total cost of burro removal would be 	<ul style="list-style-type: none"> • Maintaining a burro herd size at 130 animals would be the most expensive alternative over the long-term. The estimated cost for capture, transporting, adoption preparation and adoption is \$1,200 per animal. • Grazing fees collected under the existing management are not sufficient to manage a grazing program. Additional funding would be needed. • Implementing the desert tortoise 	<ul style="list-style-type: none"> • The impacts of this alternative are the same as alternative 1 except as described below. • More staff would be needed to operate new information centers at Cima and Soda Springs, but would not include a Kelso information center. • Campground expansions, improvements to backcountry sites, and new interpretive and

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<p>high. The estimated remaining 700+ burros that exist in the Preserve would cost over \$500,000 to capture and remove. Due to reproduction rates, many more animals than currently exist would have to be ultimately captured to reach zero. In addition, the last remaining burros are likely to be in remote locations, which dramatically increases their capture costs.</p> <ul style="list-style-type: none"> • The cost estimate for controlling burro population in the Clark Mountain unit of Mojave National Preserve would include long-term management, removals, surveys, and fencing of springs and other sensitive resources. These costs would be high and long-term. • This alternative would result in higher administrative costs to implement the recommendations of the desert tortoise's recovery plan. • Oversight and management of the grazing permits would continue to require staff and budget until conservation groups are successful in purchasing the permits. • Oversight of the mineral development program would continue to require staff and dollars to manage. • Costs would result from inventorying, monitoring and administration of activities such as wilderness access, guzzler maintenance, water source monitoring, wildlife management, habitat restoration studies and work, law enforcement activities, managing camping restrictions at designated campsites, and construction of improvements to facilities for visitors with disabilities. • Increase in staff and costs for operating and maintaining Kelso Depot and Barstow visitor contact center. • New maintenance facilities at Baker and Hole-in-the-Wall would improve capabilities. • New housing would decrease time for employees to get to their jobs and save vehicle fuel, but would increase maintenance workload. • New housing at Baker would be more energy-efficient than existing trailers. • Initial large administrative workload and cost to acquire properties, diminishing over time as nonfederal lands and interests are brought under public ownership. • New properties acquired may increase maintenance or stabilization costs. 	<p>recovery program would entail some initially high administration costs, but the costs should diminish as recovery proceeded.</p> <ul style="list-style-type: none"> • Administering wilderness access for guzzler and ranching developments maintenance would result in high administrative review, permitting, and monitoring costs. • Campground administration support would be continued with staff and volunteers managing campgrounds. • NPS staffing levels would not increase with this alternative; however, all workloads would increase limiting National Park Service's ability to serve the public and protect resources. • Employee housing would remain inadequate and below NPS standards. • The dormitory housing at Hole-in-the-Wall is already over capacity. Any increase would place the fire crew in extremely overcrowded conditions. The existing structure is in poor condition. The garage for the fire truck is too small to properly park the truck and support equipment. These conditions could be resolved if funding is provided to replace the fire center dormitory and garage. • The lack of a comprehensive general management plan would leave the National Park Service in the situation of managing the new park under applicable laws, regulations, and policies with no overall guiding document or vision. This could result in many projects being proposed and considered without the benefit of an overarching strategy that would suggest whether the projects would achieve the management objectives for the unit. 	<p>hiking trails would create additional staff workload.</p> <ul style="list-style-type: none"> • Monitoring and efforts needed to enforce the Mojave Road's vehicle capacity would require additional staff time.
IMPACTS ON EDUCATION AND RESEARCH		
<ul style="list-style-type: none"> • Potential for disruption of research plots 	<ul style="list-style-type: none"> • Cattle, burros and vandalism could 	<ul style="list-style-type: none"> • The impacts of this alternative are

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<p>would be reduced through burro removal and monitoring efforts.</p> <ul style="list-style-type: none"> The removal of feral burros, retirement of donated grazing permits, elimination of target shooting and the staking of future mining claims have all improved the area's research and education potential. The recent acquisition of the Granite Mountains grazing permit by the National Park Foundation, and subsequent donation to the Preserve for retirement, means the natural reserve is free of grazing for the first time in over 100 years. A shorter hunting season would slightly increase safety of researchers, students and teachers. Designated campsites in sensitive areas would reduce the potential for negative effects on field research projects or sensitive resources. 	<p>disrupt or destroy research plots.</p> <ul style="list-style-type: none"> There is minimal conflict between the public and education and research within the Preserve because of low visitation to Soda Springs Desert Study Center and the Granite Mountains Natural Reserve. Illegal OHV trespass from the adjacent BLM Rasor OHV area near Soda Springs would continue to result in some level of trespass and possible vandalism of facilities and research plots in the area. NPS policies and regulations regarding research permits, group size and the creation of wilderness by Congress has altered some of the activities and motorized access to areas that the research and education community previously enjoyed. 	<p>the same as alternative 1 except as described below.</p> <ul style="list-style-type: none"> Adding an information center at Soda Springs (designed for a non-staffed operation) and NPS guided tours would increase visitation, creating potential conflicts between research and education use and the public. Ranger-guided tours and interpretive displays and programs at the information center would provide information about scientific desert research.
IMPACTS ON LANDOWNERSHIP AND USE		
<ul style="list-style-type: none"> Elimination of free-roaming burros from Mojave would eliminate some resource use conflicts because burros would no longer use private and state lands within the Preserve for forage and water. A shorter hunting season would result in less trespassing on private lands and fewer hunting incidents. The changes proposed in the management of grazing would adversely impact livestock grazing operations and may influence the future value of the permits. Restrictions associated with desert tortoise critical habitat would reduce the number of cattle and area that may be grazed. Reduced resource conflicts for private landowners and potential beneficial impacts on ranching operations with burro removal. Impacts on mineral development activities would be the same as alternative 2. 	<ul style="list-style-type: none"> Free roaming burros and cattle present some resource use conflicts by foraging and use of water on unfenced private and state lands. Ranchers paying grazing fees and maintaining water sources are supporting burros at their expense. Increased visitation may cause conflicts with private landowners. Acquisition of mining properties that do not meet NPS regulatory approval standards would permanently remove those sites from potential mineral development, reducing the total amount of available mineral resources in the region that may be developed. 	<ul style="list-style-type: none"> The impacts of this alternative are the same as alternative 1 except as described below. Increased acquisition of mineral rights may occur as a result of the sensitive resource analysis and the identification of areas where mineral development would be incompatible with the Preserve mission.
CUMULATIVE IMPACTS		
<ul style="list-style-type: none"> Implementing this alternative (and a similar one for Death Valley National Park) would result in a large reduction in feral burro populations in the California Desert Conservation Area's public lands (a 64% reduction in the BLM's herd management levels. While the result would be a major decrease in burro populations throughout the desert, it would result in improved native desert habitat conditions. Interagency cooperation in the management of burros and grazing, in monitoring of tortoise populations, and in 	<ul style="list-style-type: none"> Death Valley, Lake Mead, BLM and the military have also been removing feral burros from their lands, resulting in overall declines in populations desertwide. Authorized populations on BLM herd management areas still exceed their management levels in most areas; therefore, the overall population of feral burros remains higher than allowed. Denial of mining proposals that do not meet NPS regulatory approval standards would contribute minimally to the existing situation where large 	<ul style="list-style-type: none"> Overall, cattle grazing opportunities throughout the desert would decline as desert tortoise recovery actions are implemented. Although these changes would result in an overall decline in cattle grazing opportunities in the desert, proposed changes would only be implemented where willing seller conservation buyouts could not be achieved. Many ranchers would likely sell their permits at fair market value and reinvest in other

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<p>implementing desert tortoise recovery measures, would result in improved conditions for tortoise health throughout its range.</p> <ul style="list-style-type: none"> • There are unknown consequences regionally on fire potential from the removal of grazers (burro and cattle) after over 140 years of their presence. Such a result could have adverse effects on tortoise habitat, and could threaten fire intolerant habitats, such as the Cima Dome Joshua tree woodland. • The elimination of hunting due to the expansion of Death Valley and Joshua Tree, and the reduced access caused by the creation of wilderness areas throughout the desert when combined with this proposal results in fewer opportunities for the hunting community to recreate. • Opportunities for backcountry vehicle-based camping when combined with reduced vehicle access due to wilderness designation would further limit some visitors use of the desert. • Acquisition of Catellus lands throughout the desert on BLM and park lands would make nearly 400,000 additional acres available for public use. • Coordinated interagency studies and education efforts would improve the level of knowledge about cultural resources throughout the desert. • Overall, grazing use would substantial decrease throughout the desert as a result of desert tortoise recovery efforts by all agencies. 	<p>expanses of the desert are no longer available for mineral entry, and therefore, development opportunities are restricted.</p> <ul style="list-style-type: none"> • Existing management actions throughout the southern California area, as a result of Congressional action, have resulted in major changes in the overall management of the federal lands. These effects are not the result of planning decisions made in this plan or other agency plans, but rather have resulted from implementation of laws and regulations based on actions of Congress. • The cumulative impacts of the no-action alternative on archeological sites, ethnographic resources, and historic properties are difficult to analyze because there has been no long term monitoring program. • Development near archeological sites would increase the likelihood of eventual inadvertent damage to the sites, resulting in a slow deterioration of resources over time. • It is presumed that the significance and integrity of ethnographic sites would be diminished by increasing visitation because such sites become less suitable for ethnographic uses as more people congregate near them. • Piecemeal inventory, evaluation, interpretation, and preservation of archeological sites, ethnographic resources, and historic properties and cultural landscapes would not enable the National Park Service to manage cultural resources in the Preserve in a manner consistent with the requirements of the National Historic Preservation Act or the National Park Service's <i>Cultural Resource Management Guideline</i>. • The development of private and state lands in the Preserve would contribute to the overall loss of desert resources and habitat for native species. • Potential road closures by landowners irritated by trespass and vandalism could reduce overall public access even further (beyond the closure of roads in wilderness areas designated by the California Desert Protection Act, and potential route closures for protection sensitive species and habitat). 	<p>ventures or continue ranching in other locations.</p> <ul style="list-style-type: none"> • The eventual total removal of burros in the Clark Mountains would be a minor decrease in the overall decline of the feral burro populations throughout the desert.